

**Resilience explanations from adolescents
challenged by unemployment**

Katherine Theresa Malakou

2019

**Resilience explanations from adolescents challenged by
unemployment**

by

Katherine Theresa Malakou

Submitted in partial fulfilment of the requirements for the degree

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(Educational Psychology)

Department of Educational Psychology
Faculty of Education
University of Pretoria

SUPERVISOR
Prof. L. Theron

PRETORIA
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Dedication

I dedicate this research to my parents. To my mother, who inspired me to love learning, and my father, who made this all possible.

---oOo---

Acknowledgements

I would like to express my sincere gratitude and appreciation to the following persons who contributed and supported me during the study:

- ❖ Prof. Linda Theron, my wonderful research supervisor, for her support, guidance, kindness, understanding and for pushing me to believe in myself. I am immensely grateful;
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- ❖ My friend and colleague, Mariaan Prins, for her kind words and support during the particularly challenging moments throughout the research process;
- ❖ Frank, for being with me every step of the way.

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Declaration of Originality

I, Katherine Theresa Malakou (student number 18106804), declare that the dissertation, which I hereby submit for the degree Magister Educationis in Educational Psychology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Katherine Theresa Malakou
May 2019

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Ethical Clearance Certificate



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RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER: UP 17/05/01 Theron 18-004
DEGREE AND PROJECT	M.Ed Resilience explanations of adolescents challenged by unemployment
INVESTIGATOR	Ms Katherine Malakou
DEPARTMENT	Educational Psychology
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CHAIRPERSON OF ETHICS COMMITTEE: Prof Liesel Ebersöhn

A handwritten signature in black ink, appearing to read 'Bronwynne Swarts', written over a horizontal line.

CC
Ms Bronwynne Swarts
Prof Linda Theron

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

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Ethics Statement

The author, whose name appears on the title page of this dissertation, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's *Code of ethics for researchers and the Policy guidelines for responsible research*.

Katherine Theresa Malakou
May 2019

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Abstract

Resilience explanations from adolescents challenged by unemployment

by

Katherine Theresa Malakou

Supervisor: Prof. L. Theron

Degree: M. Ed. (Educational Psychology)

My study is a sub-study of the Resilient Youth in Stressed Environments (RYSE) Project (ethics clearance, UP17/05/01). The RYSE project focuses on gaining a more thorough understanding of the resilience of youth living in communities that are dependent on the petrochemical industry, as well as the associated risks. The purpose of my qualitative sub-study was to explore how older adolescents from the eMbalenhle community explain resilience in the face of unemployment. The current literature tends to be reliant on academic understandings of resilience. In order to gain a more comprehensive understanding of resilience, it is important to recognise the perspectives of resilience of adolescents who live in a highly stressed environment that is confronted by multiple risks. In order to achieve the purpose of my study, I assumed an interpretivist approach. This approach is appropriate for developing an understanding of adolescents' individual experiences and perceptions of resilience in a petrochemical community and in the face of unemployment. To guarantee that my question was answered, I utilised a phenomenological research design. The RYSE Project has established a Community Advisory Panel (CAP), and the CAP purposively sampled the participants involved in my study. Seven adolescents (all male) between the ages of 18 and 24 were recruited from eMbalenhle in the Govan Mbeki municipality in Mpumalanga. An Arts-based activity (draw and talk) and an informal group discussion were used to generate data. An inductive, thematic analysis of the data was conducted in order to identify themes. Ungar's (2011) Social Ecology of Resilience Theory (SERT) provided the theoretical framework for my study. The main themes that emerged from the data, regarding resilience enablers among adolescents in the face of unemployment, were: Having a vision, appropriating opportunities, and drawing on social support. The themes that arose from the adolescents' explanations

of resilience support the SERT. I think these themes are important for educational psychologists who work with adolescents challenged by unemployment in eMbalenhle because they highlight the importance of social support and community in interventions. In addition, these themes provide possible individual strategies, from the perspective of adolescents, that could allow for positive adaptation despite adversity.

Key words

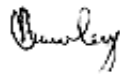
- Resilience, unemployment, adolescents, petrochemical

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Declaration – Language Editor

Nick Cowley MA
27(D)834135050
12 Arniston
The Willows Estate
Kelland
Randburg

I hereby certify that I have checked and edited Ms Katherine Malakou's mini-thesis for grammatical and spelling accuracy, consistency of style and felicity of expression.



13 May 2019

Nicholas Paul Cowley MA (University of the Witwatersrand)
Former Radio News Editor (1988-2018)
South African Broadcasting Corporation (SABC)
0117149111
Henley Rd
Auckland Park
Johannesburg

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Chapter 1

Introduction

1.1 INTRODUCTION AND RATIONALE FOR THE STUDY

My study (which is of limited scope) is a sub-study of the Resilient Youth in Stressed Environments (RYSE) project. The RYSE research project (RYSE Project, 2017–2021) was established in order to acquire more of an understanding of the effect of the carbon cycle on young people’s mental health and overall well-being. The RYSE project is a partnership between Canada and South Africa. It is focused on learning about the resilience of adolescents (aged 15 to 24) who live in communities that are challenged by industry (petrochemical) and the climate change linked to this industry. The South African research site is based in Secunda, and the adjacent township of eMbalenhle, in the province of Mpumalanga. A particularly large gas and oil production industry is situated in Secunda. As such, climate change, as well as pollution relating to the oil and gas production, are active stressors on adolescents’ lives (Resilience by Design, 2017). Furthermore, the township of eMbalenhle is structurally disadvantaged (Comrie, 2016). Adolescents from disadvantaged communities are often overlooked (Albien & Naidoo, 2017; Iwasaki, 2015; Patton et al., 2016). Many resilience researchers (Hart et al., 2016; Haynes & Tanner, 2015; Sanders, Munford, & Boden, 2017; Sanders, Munford, & Liebenberg, 2017) highlight the importance of understanding marginalised adolescents’ perspectives on resilience. If resilience researchers do not consider these adolescents’ perspectives, resilience theory could be limited to the views of adults and more privileged groups of people (Hart et al., 2016; Iwasaki, 2015). As an Educational Psychologist in training in the South African context, I too think that it is important to understand resilience from the perspective of marginalised groups who face a variety of stressors. Unemployment in South Africa is extremely high, with a large number of unemployed people between the ages of 15–24 (Statistics South Africa, 2018a) (generally, these adolescents do not attend school or a tertiary education programme either). In addition, the petrochemical industry in South Africa is booming (Research & Markets, 2018). I think it is important for Educational Psychologists to understand adolescents’ explanations of resilience in the face of these stressors (unemployment and effects of the petrochemical industry), as they are becoming increasingly common. A sound understanding of resilience-enabling factors in this context could be used to intervene responsively and to promote change on institutional and government levels.

1.2 PROBLEM STATEMENT

It is generally accepted that there cannot be resilience without risk or adversity (Masten, 2001; Masten & O'Dougherty Wright, 2010; O'Dougherty Wright & Masten, 2015; Ungar, 2011, 2015). Therefore, it is necessary to look at the particular kinds of risks that older adolescents face. The specific risks an older adolescent faces could change how resilience is defined and enabled for this developmental phase (Cicchetti, 2013; Masten, 2001; Masten & O'Dougherty Wright, 2010; Payne, 2011; Ungar, 2011, 2015). The majority of South Africa resilience studies have excluded older adolescents (Van Breda & Theron, 2018). There is an increasing understanding that even though older and younger are both in the adolescent phase of development, what enables their resilience could be different (Masten, 2014). Unemployment is a particularly challenging risk among older adolescents in South Africa. The official unemployment rate currently sits at 27.2% of the population (Statistics South Africa, 2018b). Of those unemployed, 31.6% are between the ages of 15 and 34 years old (Statistics South Africa, 2018a). Unemployment among older adolescents is considered a risk factor as it contributes to possible causes of adversity, including economic stress, social pressure, and lack of social interaction with colleagues (Crisp & Powell, 2017; Vancea & Utzet, 2017). It can also stunt personal growth and cause older adolescents to feel they have a lack of identity. Long periods of unemployment among older adolescents can also lead to depression (Moorhouse & Calabiano, 2007). Peyper (2017) explains that if the high rate of unemployment amongst older adolescents is not addressed, it could create a cycle of prolonged unemployment and poverty. In addition to experiences of unemployment, the participants in my study are also exposed to risks that are associated with living in a challenged community. The specific challenges the members of the eMbalenhle community face are high levels of pollution, resource constraints (South Africa. Department of Rural Development & Land Reform, 2014; Kasangana, Masekameni, Saliwa, & Makonese, 2017; Mathebula, 2018c) and violence (Makhaza, 2018; Mathebula, 2018c; Oosthuizen, 2018). Growing up in a community that is challenged by pollution can affect physical development (Cohen et al., 2017), and contribute to the development of both physical (see: Franklin, Brook, & Pope, 2015; World Health Organization [WHO], 2016) and mental health problems (see: Oudin, Bråbäck, Åström, Strömgren, & Forsberg, 2016; Perera, 2016; Power et al., 2015). However, despite recognition of the risks of both experiences of unemployment amongst older adolescents and living in a challenged community, it appears that there are no previous South African studies that explore adolescents'

understanding of resilience in the face of unemployment and within the context of structural disadvantage.

Masten (2018) notes that interest in resilience theory has surged in recent years, and as such, there are multiple published resilience studies. Van Breda and Theron (2018) have reviewed the numerous South African resilience studies. These studies include various contexts of risk, such as: structural disadvantage (Brittian, Lewin, & Norris, 2013; Jefferis & Theron, 2017; Liebenberg et al., 2016; Van Rensburg, Theron, & Ungar, 2019; Smit, Wood, & Neethling, 2015); Human Immunodeficiency Virus (HIV) (Burman, Aphane, & Mtapuri, 2017; Woollett, Culver, Hatcher, & Brahmhatt, 2016); suicide ideation (George & Moolman, 2017); food insecurity; intellectual disability; burn survivors (Lau & Van Niekerk, 2011); father absence (Zulu & Munro, 2017) and transitioning out of residential care (Van Breda, 2015) among others. Despite this plethora of research, O'Dwyer, Moyle, Taylor, Creese, and Zimmer-Gembeck (2017) point out that within the current literature on resilience, there is a deficiency in the areas of understanding and exploration into older adolescents' explanations of resilience. How older adolescents understand resilience is important, as there has been an overreliance on adult and academic explanations of resilience (Payne, 2011; Liebenberg & Theron, 2015; Theron, 2017). Further, there is a need to expand existing explanations of resilience, as the current explanations have generally emerged from work done with people in North America and Europe (Masten, 2014a; Ungar, 2011). Consequently, there is a need to include the voices of individuals in marginalised communities in South Africa and other non-western countries (Hills et al., 2016; Theron, 2016; Ungar, 2011).

Therefore, it is important to conduct a study that aims to account for the resilience of older adolescents from eMbalenhle and explore how they explain resilience in their own words, despite experiences of unemployment (and other environmental risk factors). I focus on experiences of unemployment because the preliminary data from the RYSE participants in 2017 indicated that adolescents faced various risks, but that (older) adolescents experienced unemployment as the worst of these risks (Ungar & Theron, 2018). Such unemployment challenges also referred to older adolescents' personal experience of adult family members or friends being unemployed.

1.3 PURPOSE OF THE STUDY

Within the more expansive RYSE study, the purpose of my qualitative sub-study is to explore how older adolescents from the eMbalenhle community explain resilience in the face of unemployment.

1.4 RESEARCH QUESTION

My study of limited scope is guided by a single research question:

Primary research question:

How do older adolescents, living in eMbalenhle, explain resilience in the face of unemployment?

1.5 THEORETICAL FRAMEWORK: SOCIAL ECOLOGY OF RESILIENCE THEORY ([SERT]; UNGAR, 2011)

As previously stated, my study is a sub-study within the RYSE project. Therefore, my study uses the same theoretical framework as the other studies within the RYSE project. This theoretical framework is the Social Ecology of Resilience Theory ([SERT]; Ungar, 2011). This theory maintains that resilience processes differ depending on the culture and context of the people being studied. Therefore, western understandings of resilience cannot necessarily be applied to individuals in more marginalised communities (Theron & Theron, 2014). Furthermore, SERT takes a systemic approach to research (Ungar, 2011). Multiple South African resilience studies have preferred a systemic approach (see: Fielding-Miller, Dunkle, & Murdock, 2015; Scorgie et al., 2017; Smit et al., 2015; Van Breda, 2017; Van Breda & Dickens, 2017 for some examples). These studies demonstrate that a systemic approach is appropriate for resilience research in South Africa, and therefore give me confidence that SERT (Ungar, 2011) is a relevant theoretical choice for my study. My study asks older adolescents, who live in eMbalenhle, to explain resilience in the face of unemployment. In doing so, my study aims to appreciate different perspectives on resilience.

Ungar (2011) explains SERT includes four guiding principles. These are:

Decentrality: this suggests that resilience cannot only be attributed to the individual, rather it is a product of the resources that an individual's environment provides, and how those resources are utilised by individuals living in that environment (Theron, 2016; Ungar, 2011, 2015).

Complexity: this principle proposes that resilience is variable. Complexity implies that resilience is influenced by different factors such as age, developmental state, context, level of risk, and the type of risk individuals face (Ungar, 2011). As such, an adolescent and an adult might explain resilience differently, or they might draw on different resources to adjust positively to adversity (Masten, 2014b). Similarly, older adolescents challenged by different risks might explain resilience differently. For example, in South Africa, Theron (2017) found that among her participants, adolescents prioritised quality education in their resilience development, whereas adults prioritised supportive family networks.

Atypicality: is concerned with processes of adaptation that may not appear to be positive but are necessary for the survival of the people who adopt them (Ungar, 2011). This is referred to as ‘hidden resilience’ (Ungar, 2004). A study of resilience among street-connected youth provides examples of how resilience can be informed by unconventional practices such as teasing, violence and vandalism, lying, and bonding with other street children (Malindi & Theron, 2010).

Cultural relativity: According to Ungar (2011) positive adaptation is culturally relative. Positive outcomes are determined by cultural influences and are dependent on the support provided within the respective cultures (Masten, 2014a). For example, an Australian study on residential relocation among children, found that children with strong social skills and interpersonal strengths, such as empathy and problem-solving, were more likely to demonstrate resilience (McLeod, Heriot, & Hunt, 2008); whereas, a study among South African Basotho youth found that strong community support systems and spirituality played an important role in the participants’ ability to adapt positively (Theron, Theron, & Malindi, 2013).

1.6 CONCEPT CLARIFICATION

1.6.1 CONCEPT 1: RESILIENCE

According to Ungar (2019) “...resilience is best understood as a process of a single system, or network of systems, interacting in ways that optimize functioning that benefit one or more systems with as few consequences (trade-offs) as possible.” In light of this statement, resilience in this study, is defined as the process that moves people toward contextually positive outcomes in spite of adversity (Masten, 2011; Rutter, 2012; Ungar, 2011, 2015). The process draws on promotive and protective factors (2019). These factors and processes are both within the individual and their social ecology (Ungar, 2015).

1.6.2 CONCEPT 2: OLDER ADOLESCENTS

According to Sawyer, Azzopardi, Wickremarathne, and Patton (2018) “the age of adolescence” can be defined as between the ages of 10–24 years old, as this corresponds more appropriately with biological and emotional maturation. However, the RYSE project’s Community Advisory Panel (CAP) recruited the participants, and for my specific study, adolescents between the ages of 18 and 22 volunteered to participate. As such, the working definition of the participants in my study is older adolescents, more specifically, individuals that are between 18 and 22 years old.

1.6.3 CONCEPT 3: RISK

Like resilience, risk is a complex term. It indicates an increased likelihood of adverse consequences for people that are considered to be part of a particular risk group. As risk is multifaceted, numerous risk factors often arise simultaneously within risk groups (O’Dougherty Wright & Masten, 2015). In my study, one of the risk factors is living in the Secunda area (because this is a community affected by the petrochemical industry and living amid high levels of pollution). In eMbalenhle (the township in Secunda), in December 2013 chemicals from the petrochemical plant were released into the Kleinspruit River. Residents use the river for everything from fishing to church ceremonies. Residents in eMbalenhle have also complained of developing health issues and being forced to live on medication for asthma and disturbed sleep (Comrie, 2016). The petrochemical industry has also been associated with climate change, the effects of which also pose risks to those who live in close proximity to the plants (Resilience by Design, 2017). Further risk-related concepts linked to my study (township living and experiences of unemployment) are explained in the following subsections.

1.6.4 TOWNSHIP

Pernegger and Godehart (2007) explain that the term “township” generally refers to underdeveloped, usually (but not only) urban, residential areas that were reserved for black, Coloured and Indian South Africans under Apartheid outside of the areas that were “white only” (under the Black Communities Development Act (Section 33) and Proclamation R293 of 1962, Proclamation R154 of 1983 and GN R1886 of 1990 in respect of Trust Areas, National Homelands and so-called Independent States). These areas usually lacked access to infrastructure, formal transport and farmable land. Despite the end of Apartheid and formal segregation in 1994, “townships” have remained areas where many low-income black and Coloured South Africans reside

(Percival & Homer-Dixon, 2018). According to Meinck, Cluver, Boyes, and Ndhlovu (2015), townships are typically characterised by a variety of risks (including exposure to violence, resource constraints and unemployment).

1.6.5 EXPERIENCES OF UNEMPLOYMENT

Experiences of unemployment among adolescents can precipitate poverty and financial stress, depression, lack of identity, crime, and social issues (Moorhouse & Calabiano, 2007). In South Africa, unemployment refers to individuals who are able to work and are in the process of looking for work, but do not have a job (Statistics South Africa, 2018b). The expanded definition of unemployment incorporates those individuals that are disheartened by their inability to find work and are no longer seeking employment, as well as students and individuals who do unpaid work, such as caring for children or the elderly (Merten, 2016). For the purposes of my study, experience of unemployment includes both direct and indirect experiences of unemployment. Direct experience of unemployment refers to individuals who are actively seeking work or have personal experience of unemployment, while indirect experience of unemployment refers to those individuals who know someone who is unemployed and are aware of the challenges that person faces. Indirect experience of unemployment also includes returning to school to improve matric results (instead of actively seeking employment), because there is a hope that improved matric results could increase the slim chance of securing employment.

1.7 ASSUMPTIONS

Before starting my data generation, I made the following assumptions about the outcomes of this my study:

1. I assumed that experiences of unemployment were stressful for older adolescents.
2. I assumed that the older adolescents in Secunda and eMbalenhle experience adversity.
3. In accordance with Theron (2017), I assumed that the adolescents involved in this study define resilience in the face of unemployment as both an interpersonal and socio-ecological phenomenon.
4. From my work experience with disadvantaged youth, I assumed that these older adolescents would draw considerable strength from community and family support as well as spirituality and/or religion.

5. From my personal experience in times of adversity, I assumed that peer support would be a resilience-enabling factor among adolescents.
6. From engaging with literature about unemployment (e.g. Abbott-Chapman, 2005; Alexander, 2010; Beck, Wagener, & Grix, 2005; Mathebula, 2018b; Statistics South Africa, 2017, 2018b), I assumed that the participants would not be positive, hopeful individuals, due to the amount of adversity that they endure.

1.8 METHODOLOGY

1.8.1 EPISTEMOLOGICAL PARADIGM

The epistemological paradigm for my study is interpretivism. According to Benner (2008), interpretivism is an inductive practice that aims to uncover meaning in the participants' subjective experiences of social phenomena. My explanation for choosing an interpretivist epistemological paradigm, as well as the advantages and disadvantages of choosing interpretivism, are elaborated on in Chapter 3 (Section 3.4.1).

1.8.2 RESEARCH PARADIGM AND DESIGN

The research paradigm for my study was qualitative. Qualitative research focuses on studying the meaning individuals ascribe to certain concepts or phenomena. Qualitative research places emphasis on the various socio-cultural and/or environmental factors that influence individuals' explanations and attributions of meaning (Schensul, 2008). The research design I chose was phenomenological. Following Dudovskiy (2018), in order to complete my study, I needed to gain insight into how older adolescents from eMbalenhle understand resilience in the face of unemployment. A phenomenological research design centres on participants' immediate, lived experience of phenomena, and the core meaning participants mutually attribute to a shared experience (Adams & Van Manen, 2008; Bloomberg & Volpe, 2016). The reasons for my choice of a qualitative research paradigm and a phenomenological research design, as well as their advantages and disadvantages, are described in Chapter 3 (Sections 3.4.2 and 3.5.1).

1.8.3 SAMPLING

For my study, I used purposive sampling. Purposive sampling involves the selection of participants with a particular purpose in mind (Maree & Pietersen, 2016). To be

recruited, participants needed to meet the RYSE criteria (i.e., live in eMbalenhle; be an adolescent) and be unemployed and/or have experience (direct/indirect) of unemployment. My reasons for choosing purposive sampling as the sampling procedure, as well as the advantages and disadvantages of purposive sampling, are addressed in Chapter 3 (Section 3.5.2). In sum, seven participants (average age 20 years old) formed the sample for my qualitative study of limited scope. I provide details of the participants in Chapter 3 (Section 3.5.2).

1.8.4 DATA GENERATION

Initially, I aimed to use photo-elicitation to facilitate discussion. However, as I further explain in Chapter 3, section 3.5.3, I had to adapt my data generation method. As such, I used draw-and-talk (Guillemin, 2004) to facilitate an informal discussion. Draw-and-talk involves the participant creating a drawing and then eliciting a meaning from the drawing through the participant's explanations and description of their drawing (Mitchell, Theron, Stuart, Smith, & Campbell, 2011). The reasons I used draw-and-talk as the data generation method and the advantages and disadvantages of this data generation method are discussed in Chapter 3 (Section 3.5.3).

1.8.5 DATA ANALYSIS AND INTERPRETATION

For data analysis and interpretation, I used Braun and Clarke's (2006) step-by-step approach to thematic content analysis. Thematic content analysis inductively identifies and organises themes and patterns from the data. The processes of this thematic approach to analysis are detailed in Chapter 3 (Section 3.5.4). My motivation for using thematic content analysis, and the advantages and disadvantages of this type of analysis, are examined in Chapter 3 (Section 3.5.4).

1.9 QUALITY CRITERIA

Nieuwenhuis (2016) explains that in order to establish trustworthiness in qualitative research, the principles of quality criteria must be followed. These criteria include: credibility, dependability, transferability, confirmability and authenticity. In Chapter 3, section 3.7 these criteria are discussed in detail and are therefore not dealt with in this chapter.

1.10 ETHICAL CONSIDERATIONS

Ethical considerations refer to the ethics codes and frameworks endorsed by the university or funding body that mediate access to data or research sites (Hammersley, 2015). In short, ethical considerations give the researcher guidelines on what they should or should not do when conducting research (Creswell, 2015). My study formed part of the Resilient Youth in Stressed Environments (RYSE) project. The Ethics Committee, Faculty of Education provided the necessary ethical clearance for the RYSE study (UP 17/05/01). I applied for, and was granted, associated ethical clearance. When I engaged with the participants, I was mindful of working ethically as described in Chapter 3, section 3.7.

1.11 CONCLUSION

A vast number of resilience studies have been conducted both internationally and within the South African context. However there seems to be no prior research on older adolescents' explanations of resilience in the context of unemployment (in addition to living in a township affected by petrochemical pollution). The aim of my study is to contribute to the development of South African resilience research by exploring older adolescents' explanations of resilience in the face of unemployment. As detailed in Chapter 2, there are multiple studies on resilience enablers among adolescents. However, there is limited literature that allows older adolescents who are challenged by these specific risks to voice their explanations of resilience. The available literature relevant to my study is discussed in Chapter 2.

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Chapter 2

Literature Review

2.1 INTRODUCTION

My literature review includes two sections. The first section focuses on what is known about risks associated with the petrochemical industry and the effects it has on people who live in a community that is in close proximity to a petrochemical plant. In addition, because my study took place in a resource-constrained township, I explain what is known about the risks associated with townships. In short, as the risk section shows, these two risks are integral to adolescents having experiences of unemployment. In the second section I will focus on analysing the resilience literature that is relevant to my study, specifically that which involves the resilience of individuals from similar contexts to my participants. This review of the literature reports international and South African resilience studies that focus on adolescents.

2.2 RISKS

In this section I will discuss three risks that are associated with living in a township that is in close proximity to the petrochemical industry, and how these risks could prompt or worsen experiences of unemployment. I will begin by looking at the physical risks. Next, I will explain the psychosocial risks. Finally, I will review the economic risks. These physical health-related, psychosocial and economic risks are typically interrelated and can contribute to the likelihood of older adolescents having experiences of unemployment (Khaba, Khamisa, & Tshuma, 2017). By outlining the common risk-related themes linked to adolescents who reside in similar contexts to the participants involved in my study, I hope to better understand the challenges which require resilience if a positive outcome is to be achieved.

2.2.1 PHYSICAL HEALTH-RELATED RISKS

Physical health-related risks could be defined as situations or circumstances that increase an individual's chances of becoming physically ill (Naylor et al., 2016). This section will look at the common findings that occur in studies that consider the physical health risks associated with living near a petrochemical industry, as well as township living, and how these risks relate to experiences of unemployment. This section will also discuss how the physical health-related risks of a context similar to that of the

participants involved in my study, may exacerbate experiences of unemployment among older adolescents. From the literature, I identified two main themes for physical health-related risks. These are *non-communicable diseases* and *resource constraints*.

2.2.1.1 Non-communicable diseases

Non-communicable diseases (NCD's) can be defined as “diseases with a long duration and slow progression” (World Health Organization (WHO), 2018, para. 2). NCD's are also known as diseases that cannot be spread from a person or animal to another (WHO, 2018). The WHO (2017) states that there are four main categories for NCD's, namely: cardiovascular disease, cancer, chronic respiratory diseases and diabetes. NCD's are a much bigger challenge for individuals living in low- to middle-income countries like South Africa, because these countries do not have the resources to manage the diseases on such a large scale (Kaba, Khamisa, & Tshuma, 2017). The WHO (2018) explains that NCD's account for 63% of deaths world-wide, and 85% of deaths in developing countries. Physical health-related risks associated with NCD's in the context of the petrochemical industry, particularly regarding respiratory health, have been widely reported (Bateson & Schwartz, 2007).

The emissions from the petrochemical industry are likely to contain toxic chemical compounds that can be a health risk for the communities that live in close proximity to the petrochemical plants (Kampeerawipakorn et al., 2017). Studies report similar adverse health outcomes in children and adolescents in both developing and developed countries (J. Currie, Graff Zivin, Mullins, & Neidell, 2014). However, in developing countries, individuals exposed to air pollution are even more at risk, as these individuals often lack the resources to counter-balance the physical effects of air pollution (Marmot, Allen, Bell, Bloomer, & Goldblatt, 2012). Brender, Maantay, and Chakraborty (2011) report that young people are the most vulnerable to respiratory health problems from exposure to air pollution emitted from industry, simply because they breathe more. Bateson and Schwartz (2007) note that because children are “mouth breathers” (p. 238), they breathe more deeply and take in more air, so they are more likely to breathe in more chemicals. Consequently, as children and adolescents are still developing physically, they are more at risk of experiencing chronic health issues when they are exposed to air pollution associated with the petrochemical industry (Brender et al., 2011).

Studies on adolescents in the United States America (USA) and the European Union (EU), concluded that children were more vulnerable to respiratory health

problems from air pollutants (D'amato et al. 2015). Exposure to these pollutants increased their risk of asthma, poor lung function and respiratory effects such as chronic bronchitis and lung cancer (Kampeerawipakorn et al., 2017). Due to the rapid growth of towns, transport for people, and especially heavy-duty trucks transporting materials through the areas, road traffic emissions contribute to the air pollution in highly industrialised areas (Tan et al., 2015). Diesel fumes were found to be a notable health risk as they are composed of fine particle matter and are able to penetrate the lungs more deeply and affect the lower respiratory tracts. Thus, individuals consistently exposed to diesel emissions were more likely to display symptoms of asthma, wheezing, and bronchitis as well as respiratory and cardiovascular disease (D'Amato, Cecchi, D'Amato, & Liccardi, 2010). Pollution composed of fine particle matter was also found to modify cell growth, cause chronic irritation of the nose and eyes, headaches, lung function impairment, fatigue and nausea (Eom et al., 2018). Chronic exposure to air-pollutants was associated with coughing, diminished lung function, sputum production as well as bronchial inflammation (Ferecatu et al., 2010). In a study conducted with 25 participants in St James, Louisiana, USA, many participants spoke of the high rates of respiratory illness and lung cancer in the area (Davies, 2018). In fact, Davies (2018) refers to the effects of living among chronic pollution associated with the petrochemical industry as a form of "slow violence" (p. 1539). "Slow violence" (Davies, 2018, p. 1539) poses the idea that the more chronic the exposure to pollution and a polluted environment, the more likely the individual is to become ill, and as such, this is a major social and environmental injustice for those people that live in close proximity to industry (Wiebe, 2017).

Likewise, an Argentinian study on children aged from 6 to 12 years old, found that children living in close proximity to the La Plata petrochemical plants had worse respiratory health than those who did not live in these areas. The children who lived in close proximity to the petrochemical plants displayed more symptoms of asthma, lower lung function, nocturnal coughing and wheezing, than those who did not (Wichmann et al., 2009). A study conducted with 2,361 school children (aged 11–14 years old) in Cape Town, South Africa, concluded that children living in close proximity to a petrochemical refinery were more likely to exhibit symptoms of respiratory illness such as wheezing, experience asthma and carry an inhaler than the children living elsewhere in the control area (White, teWaterNaude, Van der Walt, Ravenscroft, Roberts, & Ehrlich, 2009).

Similarly, individuals living in townships have complained of respiratory health problems (S. A. Buthelezi et al., 2019). Many households within townships rely on non-

electrical fuel sources such as coal, wood and gas for cooking and heating (Elf et al., 2017). This is one of the main causes of household air pollution (HAP) which adversely affects human-respiratory health (S. A. Buthelezi et al., 2019). The World Health Organization reported Secunda as the eighth most air-polluted region in South Africa in 2016 (The most polluted city is South Africa is not where you expect, 2016). Residents in eMbalenhle have also complained of developing health issues and being forced to live on medication for asthma and disturbed sleep (Comrie, 2016). These health-related risks can cause individuals to take a larger number of sick days and restrict their working ability, which could detract from their ability to gain and sustain employment (Kaba et al., 2017). Consequently, growing up with chronic health problems could delay adolescents' cognitive development and schooling (Lavy, Ebenstein, & Roth, 2014), as well as their ability to gain consistent employment, as a result of the amount of time they cannot attend work or their level of academic achievement (Mall et al., 2015).

The above confirms that although communicable diseases such as HIV/ Acquired Immunodeficiency Syndrome (AIDS) and tuberculosis are serious challenges to youth living in townships in South Africa, NCD's such as chronic respiratory infections, cardiovascular diseases and cancer have also become serious risks (Mall et al., 2015). This could be exacerbated by the fact that townships like eMbalenhle are typically areas of low socio-economic status (Olivier, 2015). As a result of their limited income, adolescents who live in townships may also find it challenging to eat healthily (Mall et al., 2015). In addition, taking time off from work in order to visit a doctor or a clinic could be problematic for those individuals who have informal and inconsistent employment (Prochaska et al., 2014). Mall et al. (2015) explain that "days out of role" (p. 461) can have a profound effect on an individual's ability to maintain consistent and productive employment. Although the literature on respiratory health conditions relating to unemployment is limited, it is unlikely that an unemployed individual residing in a South African township would have access to the medical care needed to treat a chronic condition (Olivier, 2015). Similarly, adolescents affected by unemployment may have to take care of chronically ill family members or be unable to gain consistent employment due to illness (L. Ebersöhn, 2017).

2.2.1.2 Resource constraints

"Resource constraints" refers to inadequate food, clothing, shelter, sanitation, jobs and structural disadvantage (L. Ebersöhn, 2017; Socci & Bresciani, 2014). Towns built in close proximity to a petrochemical industry are typically associated with "boom and

bust” economic cycles (Li, Lo, & Wang, 2015, p. 311) which puts them at risk of experiencing resource constraints (Davies, 2018). In addition, the industrialization of rural land is associated with shortages of public infrastructure (Long, Tu, Ge, Li, & Liu, 2016). Resource constraints further contribute to the physical health-related risks of individuals who live in close proximity to a petrochemical industry. As Townend et al. (2017) explain, there is evidence of a strong link with respiratory illness and poverty. Often, resource constraints are associated with a lower economic status and unemployment, along with a lack of infrastructure such as hospitals and doctors to manage physical health risks (L. Ebersöhn, 2017). In many developing countries, such as South Africa, the majority of people live below the poverty line, and as such, experience a multitude of unmet basic needs (Turok & Borel-Saladin, 2016). One of those basic needs is sufficient opportunity for employment (Townend et al., 2017). Lack of employment coupled with the physical risks of respiratory health issues and heart disease can exacerbate physical risks, as adolescents would not have access to public health care, nor would they have the income to access private health care, in order to manage health risks (Olivier, 2015). The above is illustrated in a study done in a town in Louisiana, USA, which is dependent on the petrochemical industry, where it was noted that the 25 participants complained that communities’ available resources, such as drinking water, were polluted. These polluted resources worse affected those living in the poorer parts of the community, as they lacked either the means to move or the personal resources to access chronic health care (Davies, 2018). Similarly, Bolte, Tamburlini, and Kohlhuber (2009) conducted a study with children and adolescents who reside near petrochemical industries in Europe. This study (Bolte et al., 2009) demonstrated that people living in contexts of petrochemical industries often have limited access to resources and quality health care due to their socio-economic status. The lack of access to these resources intensifies the physical health problems experienced by these individuals, as they are unable to seek adequate treatment for their illnesses and, as such, are less able to be an effective part of the workforce (Cox, Irwin, Scannell, Ungar, & Bennett, 2017). Likewise, a study done in the petrochemical complex of Khuzestan, Iran (six adult participants) found that the availability of resources such as food, wood and water significantly impacted people’s ability to generate income and meet their daily basic needs (Ghoochani, Bakhshi, Cotton, Nejad, & Ghanian, 2015). It is important to note that adolescents with lower economic status are more likely to be exposed to areas with high air pollution, adversity and lack of counter-balancing resources such as quality health care (which assists in managing associated mental and physical health problems) and green spaces. Due to the lack

of counter-balancing resources, older adolescents are more exposed and vulnerable to the effects of their environment (Bolte, 2009).

The risks of resource constraints to people's physical health apply to townships – such as eMbalenhle – too. Generally, the housing in townships consists of government subsidised houses, and due to inadequate government funding, “makeshift houses” or “shacks” (Turok & Borel-Saladin, 2016, p. 384). Shacks are constructed from scrap metal, plastic and wood (Madzingaidzo, 2016). Shacks do not provide adequate shelter for harsher weather conditions, and this makes the individuals living in them more vulnerable to heat and cold. Without proper sanitation and access to water and heat, exposure to health risks increases (Turok & Borel-Saladin, 2016). In addition, people living in townships are often without the services (water, electricity, sanitation) that the government has promised them (Madzingaidzo, 2016). These limited water and sanitation services make it more difficult for individuals in townships to adopt effective hygiene practices and, as such, expose them to further physical risks and illness (Rodina, 2016). Furthermore, townships offer poor health care services and cannot address the physical risks faced by those who live in them (Olivier, 2015). These resource constraints could jeopardise an adolescent's ability to gain employment. Further, these same constraints are likely to impede the adolescent's caregivers' opportunities to gain or sustain employment (Mall et al., 2015).

2.2.2 PSYCHOSOCIAL RISKS

Psychosocial risks are defined as a combination of psychological and social risks that could contribute to individuals experiencing adverse outcomes (Bolte et al., 2009; Kruize, Droomers, Van Kamp, & Ruijsbroek, 2014). The common themes I identified that related to the psychosocial risks of living in close proximity to a petrochemical plant in a township, and in the face of unemployment, are *psychological health* and *violence and crime*.

2.2.2.1 Psychological health

Psychological health involves an individual's feelings, emotions, cognitions, self-image and spirituality. This is also referred to as the individual's mental health (Trindade, Duarte, Ferreira, Coutinho, & Pinto-Gouveia, 2018; WHOQoL GROUP, 1998). For the purpose of this study, psychological health can be inferred from an absence of both internalising (e.g. depression and anxiety) and externalising symptoms (such as developmental or learning delays). As mentioned above, the petrochemical industry is

associated with numerous physical health risks which could affect an older adolescent's ability to seek or find employment (Mall et al., 2015). However, mental health risks and physical health risks go hand in hand as the effects of one can exacerbate the other (Kruizer et al., 2014). Consequently, the petrochemical industry is associated with poor psychological health (Davies, 2018). It is therefore not surprising that Cox et al. (2017) found that older adolescents in petrochemical-dependent communities displayed high rates of affective disorders, such as depression or anxiety, because of lack of employment and/or social opportunities. Further, due to the hypermasculine nature of these communities, mental health problems were often hidden in order to avoid stigma and the impression of weakness (Cox et al., 2017). As such, individuals are more likely to experience the effects of unresolved mental health issues, resulting in further stressors in the home and possibly leading to depression, anxiety and suicide (López-Navarro, Llorens-Monzonís. & Tortosa-Edo, 2013).

Similarly, older adolescents residing in townships are confronted by multiple risks to their mental health. Older adolescents who live in townships are exposed to psychosocial risks that include suicide, teenage pregnancy, low self-efficacy, violent crime and substance abuse (Olivier, 2015). T. Buthelezi, Alexander, and Seabi (2010) explain that township living limits older adolescents' experiences of positive career role models, and this jeopardises the adolescents' self-efficacy or belief in themselves. Low self-efficacy can cause older adolescents to avoid making career decisions, and as such, limit their career choices (T. Buthelezi et al., 2010). Further, adolescent experience of unemployment, either directly or indirectly, is associated with psychological health risks. The psychological health risks associated with older adolescents who have experiences of unemployment include: poverty and financial stress, depression, and lack of identity (Moorhouse & Calabiano, 2007). These findings are also in line with local and international research which has found that persistent depression or anxiety is associated with significantly lower earnings for both employed and unemployed South Africans (Mall et al., 2015).

The petrochemical industry has also been associated with climate change, the effects of which pose risks to those who live in close proximity to the plants. In 2015, the Govan Mbeki municipality sought disaster management from the government due to intense drought (Resilience by Design, 2017). This drought could be caused by climate change associated with petrochemical areas (Borba et al., 2012). I think the stress associated with climate change could pose further risks to older adolescents'

mental well-being. This was certainly implied in studies with adolescents affected by the drought in Govan Mbeki municipality (Gwata, 2018; Vollebregt, 2018).

Air pollution and lead exposure are also associated with externalising psychological symptoms such as cognitive deficits and developmental delays in children (Lavy et al., 2014). These children were also less likely to be able to recover, as they were from lower social economic classes and had less resources available to them (Bolte et al., 2009). High levels of lead were found in the blood of children who lived near areas of industry (Yapici et al., 2006). High blood lead levels are associated with a variety of adverse behavioural outcomes (e.g. inability to concentrate, disorganisation, and inability to complete tasks) in children (Zierold & Sears, 2015). Long-term exposure to pollution from heavy metals such as those in coal has also been associated with Attention Deficit Hyperactivity Disorder (ADHD), and long-term exposure to air pollution was associated with disease of the central nervous system (Zierold & Sears, 2015). According to a study done by Halleland, Sørensen, Posserud, Haavik, and Lundervold (2019), individuals with ADHD are have a higher frequency of unemployment when compared to individuals without ADHD. In addition, they found that individuals with ADHD have challenges gaining and sustaining employment (Halleland, Sørensen, Posserud, Haavik & Lundervold, 2019) .

2.2.2.2 Violence and crime

Cox et al. (2017) reported that although psychosocial effects of living in close proximity to a petrochemical plant, are largely unexamined, petrochemical-affected communities are often prone to the development of a “masterless underclass of youth seeking excitement, entertainment and opportunity” (p.3). This could be attributed to a variety of factors including: unstable employment, boredom, and long-term separation from their homes and families. As such, these youth are at risk for Sexually Transmitted Infections (STI’s), alcohol and drug abuse, prostitution, a high abortion rate and crime (Banks, 2009). For instance, in the Niger Delta, there is major economic inequality which stems from the oil industry profits. This economic inequality contrasts groups of people with extreme wealth amongst people who experience severe poverty and exposes local youth to violence, aggression, hostility and serious conflict (Ikelegbe, 2016).

In South Africa, the psychosocial risks of living near a petrochemical plant have not been well documented. However, the conditions in eMbalenhle appear to correlate

with international studies, like those reviewed by Cox et al (2017). For example, according to Mathebula (2018a) eMbalenhle locals are fearful of violent gangs in the area, which could represent a “masterless underclass.” Out of the gang members that have been arrested, two were minors. This illustrates how (older) adolescents are at risk of negative outcomes. According to Isaacs and Savahl (2013), exposure to community violence at the adolescent phase of development has an extremely negative effect on their psychological health. From my experience as an educational psychologist in training, I think that exposure to violence adds to the number of stressors older adolescents are already managing and makes the older adolescents more at risk of becoming violent themselves. T. Buthelezi et al. (2010) notes that South African townships have high adolescent school dropout rates, which makes these adolescents more susceptible to joining gangs due to the lack of routine and structure in their lives.

In addition, adolescents who live in townships are vulnerable to the effects of violent protests (Breen, Tomlinson, & Daniels, 2019). In addition, unemployment is also associated with xenophobia and violence (Alexander, 2010). Jürgens, Donaldson, Rule, and Bähr (2013) note in post-Apartheid South Africa there is disparity between wealthy black people and people living in townships, informal settlements and Reconstruction and Development Programme (RDP) estates. Lack of services coupled with frustrations over unemployment have led to violent protests (Chikulo, 2016). In eMbalenhle, service delivery protests have been happening since June 2018, and they have become increasingly violent with community members burning down the local mall, and looting the community centre (Mathebula, 2018a, 2018b, 2018c). In eMbalenhle, older adolescents have also displayed violence and frustration at the lack of employment opportunities by attacking the busses that bring workers to Sasol (South African synthetic oil liquid industry) from outside the community (Mathebula, 2018b).

2.2.3 ECONOMIC RISKS

Although areas of industry are generally associated with economic booms, these booms can have adverse consequences, such as severe economic disparity, or locals being unsure of how to manage large sums of cash (Banks, 2009). Economic risks, such as the aforementioned, are risks that may affect “human capital.” According to Crook, Todd, Combs, Woehr, and Ketchen (2011) “The term human refers to the knowledge, skills, and abilities (KSAs) embodied in people” (p. 444). In other words, economic risks could hamper an individual’s or community’s ability to contribute to the

economy (J. Currie et al., 2014), either through lack of education, health problems or lack of job opportunities (Bharadwaj, Gibson, Zivin, & Neilson, 2017). The economic risks I have identified that apply to the risks of township living and the petrochemical industry that adolescents, like the participants involved in my study, could face, fall under the theme of *unemployment and poverty*.

2.2.3.1 Unemployment and poverty

The consequences of living in a petrochemical community, whether physical or mental health or negative psychosocial outcomes, can be long term, and as such, affect educational opportunities and/or ability to join the workforce (J. Currie et al., 2014). For example, a study in Santiago, Chile (Bharadwaj et al., 2017) showed a correlation between the effects of pollution from petrochemical industries and the long-term negative health impact on capital. This study demonstrated that the negative health issues experienced by participants posed a direct economic risk, as they influenced the participants' ability to gain employment or remain employed and contribute to the workforce. Moreover, Cox et al. (2017) found that although petrochemical-affected communities offered employment for both skilled and unskilled young people, they also create a "resource curse" (p.502), where the economy is dependent on non-renewable minerals and as such there is temporary resource abundance and slow economic growth (Parlee, 2015). Thus, these communities suffer from low incomes and social well-being, and employment opportunities are limited, particularly for women (Cox et al., 2017). In addition, eMbalenhle is challenged by its reliance on Sasol for employment. Sasol, which is the major source of employment in the area, is unable to keep up with the demand for jobs in the current economic climate (Maake, 2015; Mathebula, 2018a). Growing up in a family or household where one or more adult is unemployed is associated with risks to adolescent health and well-being (Powdthavee & Vernoit, 2013). For example, witnessing chronic unemployment among family and friends makes older adolescents more vulnerable to negative life outcomes such as crime, substance abuse and gangsterism (Olivier, 2015). In addition, parental unemployment can negatively affect child development within the family, and potentially contribute to poor physical and psychological health among adolescents (Moreno-Maldonado, Jiménez-Iglesias, Rivera, & Moreno, 2019; Powdthavee & Vernoit, 2013).

Furthermore, the youth from petrochemical communities are themselves vulnerable to unemployment and poverty. For example, Bottrell's (2009) study with 12 adolescent girls from areas surrounding petrochemical industry in Sydney, Australia,

found that a low socio-economic status has a serious impact on these young people's ability to gain a quality education, and therefore gain employment. Youth unemployment is a major issue in South Africa too. Statistics South Africa reported that the current level of unemployment is 27.2% of the population, and of young people aged 15–34, 39.3% were not in employment, education or training (Statistics South Africa, 2018b). T. Buthelezi et al. (2010) state that youth from poor socioeconomic backgrounds - like townships - usually have very limited interactions with professionals and positive career role models and therefore are not exposed to the economic, social and psychological value of work. Furthermore, townships do not typically offer a learning-friendly environment and, due to this, youth often achieve inadequate levels of education and cannot find consistent employment (Olivier, 2015). Further challenges to youth employment in townships include child-headed households and youth surviving on social grants alone (T. Buthelezi et al. 2010).

2.2.4 CONCLUSION TO RISK SECTION

In this section I discussed the multitude of risks facing the older adolescents living in eMbalenhle (a township adjacent to a large petrochemical plant). In order to gain a clearer picture of the daily adversities that the participants in my study face, I had to consider not only the variety of risks associated with living in a petrochemical community, but also the risks associated with living in a township as well. I was particularly interested in how these risks are likely to expose adolescents to experiences of unemployment. These risks illustrate how vulnerable older adolescents, like the participants in my study, are to negative life outcomes. As an Educational Psychologist in training, I believe that my literature review exposed me to a reality that I was previously unaware of, namely that the potential number of challenges these individuals face in their daily lives is staggering. I am of the opinion that insight into these hardships is imperative for me if I am to make any difference to children and adolescents in South Africa. However, I also became aware that despite all these risks, the people in this community are not victims; they fight for what they believe in, and in many cases, they show resilience. Such resilience-enabling factors will be discussed in the next section.

2.3 RESILIENCE

In this section I will consider recurring themes in the literature on resilience-promoting factors among unemployed older adolescents. Due to the lack of literature that focuses on older adolescents with experience of unemployment, I will consider studies of

resilience among a broad range of adolescents and resilience among individuals with experience of unemployment separately. I have identified three common themes which reoccur in both international and South African studies of adolescent resilience and resilience among people with experience of unemployment. These are resilience and social capital, resilience and spirituality, and personal and social purpose. I use these foci to structure how I report the resilience literature I reviewed. This was necessary as there is a vast amount of literature on adolescent resilience (Masten, 2018). As such, I needed to focus on resilience processes that matter in the face of unemployment.

2.3.1 RESILIENCE AND SOCIAL CAPITAL

Social capital can be defined as “the resources accumulated through relationships among people” (Ellison, Steinfield, & Lampe, 2007, p. 3). As such, social capital would refer to the support and resources derived from making and maintaining friendships, family support as well as community support and assets (Luthans, Luthans, & Luthans, 2004). Social capital is known to be an important resilience-promoting factor, particularly among adolescents, as it is associated with the development of self-esteem, a sense of belonging, and general psychological well-being (Van Breda & Theron, 2018). It also acts as a protective factor against adversity (Bottrell, 2009; Ellison et al., 2007).

For instance, in a study on adolescents aging out of foster care in America, Stein (2008) found that one of the factors that promoted a successful transition was the care and social support the participants received in foster care. In addition, affective support was a contributing factor in preparation for their transition. Similarly, Samuels and Pryce (2008) noted that supportive relationships had a positive effect on the transition of older adolescents into adulthood. LaFromboise, Hoyt, Oliver, and Whitbeck (2006) conducted a study of 212 Native American youth Native, who were in the fifth to the eighth Grade, living in reservations in the Midwest of the USA. Among these individuals, community support, family support, cultural support and social support were listed as important protective factors and made individuals more likely to display prosocial behaviour. In particular, having a supportive mother and perceiving community support were predictors of positive outcomes despite adversity, as these factors allowed the adolescents to feel that they were protected and could ask for advice. A supportive mother gave the adolescents a positive role model to aspire to in the future.

In an Australian study examining 12 disadvantaged adolescent girls' accounts of growing up in Glebe public housing, social capital was noted as a protective factor and a part of the resilience-enabling process. Social capital also caused "risky" or delinquent behaviours (e.g. drinking, fighting, using illicit drugs, truancy). However, these "antisocial behaviours" are seen as "normal" and part of growing up in Glebe. In this instance, social capital prompted anti-social behaviour which enables resilience as it helps to develop trust, reciprocity, emotional support and a sense of belonging. Further, this study found that the practical, emotional and social support the adolescent girls experienced encouraged positive outcomes in the face of adversity (Bottrell, 2009).

In Van Breda and Theron's (2018) critical review of South Africa and youth resilience studies (2009–2017), they determined that social support was the most prevalent resilience-enabling process among South African children and youth. Although the immediate and extended family is a key source of social support for South African adolescents (See: Breen et al., 2019; Govender et al., 2019; Kuo et al., 2019), this social support is not limited to family. For example, Malindi and Theron (2010) conducted a study of "hidden resilience" among street-connected youth, which included 20 isiZulu- and Sesotho-speaking participants (17 boys and 3 girls between the ages of 10 and 17) in South Africa. In their study, Malindi and Theron (2010) noted that their adolescent participants establish themselves into social groups, and in doing so, gain a sense of security, emotional support and belonging. In addition, these adolescents learn to rely on each other for physical and emotional resources. Furthermore, street-connected youth also rely on support from charity through begging and local resources such as shelters or Non-Governmental Organisations (NGOs). In addition, Hills, Meyer-Weitz, and Asante's (2016) study of adolescents who live on the street in Durban (6 males and 4 females, aged 14–18 years old), also determined that "supportive peer relationships" and the supportive environment of the youth's "involvement in sport activities" were protective factors of resilience. Through supportive peer relationships, the adolescents felt that they were protected, guided and advised on the best ways to survive the challenges of living on the streets. This highlights the importance of social capital in the resilience-enabling process. The studies that link resilience to social capital also report that practical support is accessed via social capital (Van Breda & Theron, 2018). For example, Cameron et al. (2013) report that vulnerable youth in South Africa gained access to food and other basic resources via relationships with extended family or friends. Similarly, in a study conducted in Cape Town (Mosavel, Ahmed, Ports & Simon, 2015) with 112 participants

including adolescents, (76 female and 36 male) there was evidence that the participants got the most support from their people in their community. In addition, these participants aimed to have a successful future so that they could provide some practical support for the people in their community who did not have access to basic resources (Mosavel et al., 2015)

Lastly, from the limited studies on resilience and unemployment that I could access, I concluded that social capital seems to be an important resilience enabler in the face of unemployment too. To this end, in a study on unemployed East German women, including older adolescents, social capital was seen as an extremely important resilience promoting factor. By establishing strong social networks, these women avoided isolation and gained a sense of belonging (Beck et al., 2005). Similarly, an Australian study involving 240 Year 10 school leavers in rural Tasmania (the equivalent of Grade 10 in South Africa) found that family was a protective factor against unemployment and provided these older adolescents with the necessary support and social capital to maintain psychological well-being (Abbott-Chapman, 2005).

2.3.2 RESILIENCE AND SPIRITUALITY

According to Kumpfer (1999), the characteristics of resilience enabled by spirituality are "... belief systems which serve to motivate the individual and create a direction for their efforts" (p. 197). Religious beliefs, religious affiliation, and connections with spiritual beings are thought to provide a sense of security, stability, identity, community, support and belonging in the face of adversity (Peres, Moreira-Almeida, Nasello, & Koenig, 2007). Spirituality has been widely documented in resilience studies of adolescents globally (Ungar, 2008) and in sub-Saharan Africa (Theron & Van Rensburg, 2018). Kim and Esquivel (2011) observe that spirituality contributes to the development of adolescent resilience in four key ways, namely: by building relationships, allowing adolescents access to various types of social support, providing guidelines for morals and moral behaviour, and giving the adolescents chances to grow and develop on a personal level.

For example, a study done in Bengaluru, India, involving 31 adolescents (16 to 24 years) whose parents were being treated for chronic illness, found that one of the factors that enabled resilience was "participation in rituals and experiencing spirituality" (Hebbani & Srinivasan, 2016. p. 1). In this study, the religious practices referred to by the participants included "harake/nema." This is a common religious practice in India where a specific Hindu deity is requested to grant a wish for an individual; in return the

individual makes an offering of sweets, fruit or money to the deity. Individuals may even fast or limit their food intake on a day dedicated to that deity to attract its attention. The rituals also involved praying to deities and visiting temples or places of worship. As these practices were typically observed when participants felt that they had no control over their adversity, I think that committing to these practices gave them a sense of control, and a feeling that they were contributing to the outcome of the challenges they were facing. In addition, this study explained that “God was a friend, counsellor and source of support” (Hebbani & Srinivasan, 2016. p. 31). As such, spirituality was viewed as a supportive and protective factor against adversity (Hebbani & Srinivasan, 2016). Similarly, Archana, Kumar and Singh (2014) explain that university students are faced with numerous socio-emotional stressors, but that spirituality buffers the effects of these stressors. In particular, the transition from school to university, coupled with pressure to succeed and make the right choices, the struggle for autonomy, adaptation to a new and different environment and financial difficulties, can contribute to poor mental and physical well-being. In this regard, Archana et al. (2014) conducted a study of 186 university students (94 males, 92 females, aged 21 to 24) in Haryana, India. The students who described themselves as spiritual also had better psychological well-being, and a daily spiritual experience protected them against stress, encouraged their personal growth and helped them to make positive decisions. Consequently, a daily spiritual experience was noted as a predictor of resilience (Archana et al. 2014).

Spirituality is also resilience-enabling for South African adolescents. Lau and Van Niekerk (2011) performed a study with 12 burn victims (aged 13–24) in two burn units in Cape Town. Six participants were from a low-income township area and six were from the urban area. However, Lau and Van Niekerk (2011) noted that most burn victims are from socially disadvantaged contexts similar to the context of my study. In this study, religion or the idea that the participants’ burn experience was “God’s will” helped them to find meaning from their burn experience. In addition, praying contributed in assisting the adolescents to recover both emotionally and physically. Similarly, Hills et al. (2016) also found that the street-connected adolescents in their study attributed religious or spiritual beliefs (which included both Christian beliefs and belief in their ancestors) as an important part of managing the challenges of living on the street. Religion was found to be a significant source of resilience and strength among these adolescents and enabled them to deal with adversity and to feel that they were not alone. So too, in a study of 55 black South Africans (all aged 18), Brittan et al. (2013) explain that religious affiliation provides adolescents with emotional, social

and occasionally financial support. In addition, religion provided the adolescents with moral guidance, and a connection to the past.

2.3.3 RESILIENCE AND PERSONAL AND/OR SOCIAL PURPOSE

Social purpose refers to “active approach goal orientation informed by a fundamental concern for others” (Ford & Smith, 2007, p. 153). Personal purpose refers to one’s purpose in life, the development of goals and motivations and the creation of personal meaning (McKnight & Kashdan, 2009). The concepts of personal and social purpose include self-efficacy and agency. Self-efficacy is the way individuals perceive their ability to achieve a goal or complete a task (Bandura, 1977). Agency refers to an individual’s capacity to influence current environment or circumstances and manage or cope with challenges (e.g. asking for help) (Ungar, 2004, 2008). In order to believe in a personal and social purpose, the individual also needs to have a level of optimism and aspirations for the future (Reigo, Ribeiro, Cunha, & Jesuino, 2011). These concepts falling under the theme of personal and social purpose that are seen as predictors of resilience, in studies on both adolescents and unemployed people, will be considered in the relevant international and local resilience studies below.

Stein (2008) conducted a study on the resilience of young people leaving foster care in the USA. In this study (Stein, 2008), preparation and the development of future plans were found to be indicators of resilience. Making future plans allowed the adolescents to consider a hopeful and meaningful future. As such, these adolescents were motivated to face challenges associated with uncertainty and being on their own. Similarly, Ishibashi et al.’s (2016) study of adolescents and young adults with cancer (18 participants, aged 12–24 years) found that a “positive attitude and sense of purpose” (p.45) fostered resilience. This sense of purpose included focusing on their own personal goals, as well as helping others who have had or are having similar experiences to their own or developing a career where they could help other people in some way.

In an American study focused on predictors of resilience among inner-city youths in Denver, Colorado, Tiet, Huizinga, and Byrnes (2010) surveyed 877 participants (446 males and 431 females) between the ages of 11 and 15 from “high-risk” areas. In their study, they found that academic commitment and involvement in extracurricular activities were predictors of resilience, as they increased the adolescents’ sense of self-efficacy and agency and allowed them to feel that they were part of and contributing to a larger group. Similarly, in Zolkoski and Bullock’s (2012)

review of the literature on resilience from the global North, they noted that involvement in extracurricular and community activities enabled the adolescents to have more positive views regarding their self-efficacy, which encouraged them to adapt positively in the face of adversity. South African studies also report the importance of extracurricular activities to personal purpose. For instance, Hills et al. (2016) explain that participation in sports activities influenced unemployed adolescents' level of resilience while living on the street. Surfing in particular allowed adolescents to discover meaning in their lives. It also gave their lives daily purpose; gave them aspirations to work towards; enhanced their strength, self-efficacy, determination and optimism; and gave them hope for a successful future.

In McNamara's (2013) inquiry into the rates, risks and resilience of adolescent suicides in Australia, she found that self-efficacy, agency and aspiration were significant protective factors against depression and suicide. A strong sense of self-efficacy allows the adolescents to try and experience success in learning and recreational activities, recognise their strengths and develop a purpose in life. McNamara (2013) recommended interventions that foster self-efficacy in order to reduce adolescent suicide risks. Similarly, Mampane's (2014) South African study, which surveyed 291 Grade 9 adolescents (185 males and 106 females), found that resilient adolescents explained their resilience based on "who they are, what they are and what they have" (p. 8). This suggests that these adolescents have a good sense of self-efficacy and agency, they are able to set and achieve goals to reach a larger purpose, they have future aspirations, and they are able to identify and utilise resources to assist them in achieving their goals. Furthermore, Breen et al. (2019) conducted a study in the township of Khayelitsha in Cape Town (41 participants, 21 males and 20 females aged 13 and 14), and they found "school achievement" fostered resilience among these participants, as it allowed them to focus on future aspirations. In this study, the adolescents felt that their personal purpose (gaining a good education, and from that, a career) could contribute to their social purpose, which was to eventually have the financial resources to take care of their families. Likewise, Theron and Van Rensburg (2018) conducted a resilience study with adolescents living in townships in the Emfuleni district (formerly known as the Vaal Triangle). In their study, they found that education was a resilience-promoting factor, as it allowed adolescents to have personal purpose, in the form of goals and plans for the future, and this provided relief in the face of adversity. It also encouraged adolescents to hope they could support their families (social purpose).

In an Australian study on resilience and unemployment (Moorhouse & Caltabiano, 2007), 77 participants (31 men and 46 women) were interviewed. The study determined that independence, self-reliance, determination and optimism contributed to a resilient outlook and afforded the participants the strength to keep looking for work. Likewise, in a Portuguese study involving 298 unemployed individuals (Victor, 2016), it was noted that self-efficacy, self-reliance and optimism were predictors of resilience in the face of unemployment. These factors enabled resilience, as the participants saw their unemployment as temporary and were thus motivated to continue trying to achieve their goal of gaining employment. A Venezuelan study on 328 unemployed people also found that self-efficacy, positive self-worth, a sense of control, optimism and having a meaningful purpose within their social-ecology were resilience enablers in the face of unemployment (Sojo & Guarino, 2011).

2.3.4 CONCLUSION TO RESILIENCE SECTION

South African studies of resilience have explored resilience in a variety of contexts of risk (Theron & Theron, 2010; Van Breda & Theron, 2018). However, there is very little documentation on the meaning of resilience in a South African context (Theron et al., 2013). Although there is some literature on how adolescents from South African townships explain resilience, there is a definite paucity in the literature on the explanations of resilience from older adolescents challenged by multiple risks (specifically, residing in a township adjacent to a petrochemical industry and associated experiences of unemployment).

2.4 CONCLUSION

Notably, as documented in this chapter, there appear to be no prior studies conducted in South Africa on how older adolescents living in a township that is adjacent to a petrochemical industry, explain resilience in the face of unemployment. This establishes the importance of my study, which focuses on how older adolescents living in eMbalenhle, explain resilience in the face of unemployment. In the next chapter, I detail the research methods and methodology I used to address my research question.

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Chapter 3

Research Methodology

3.1 INTRODUCTION

In this Chapter, I focus on the research methodology I used in my study. I begin by situating my study within the larger RYSE project. I then explain the purpose of my study. Next, I discuss the paradigmatic perspectives, methodology, quality criteria and ethical considerations that I referred to in Chapter 1.

3.2 SITUATING MY STUDY OF LIMITED SCOPE IN THE RYSE STUDY

As explained in Chapter 1, my study is part of the larger RYSE project. The purpose of RYSE is to understand adolescents' resilience in the context of a petrochemical community (<http://ryseproject.org/>). I was not part of the research team that designed the study, and for this reason, I had to choose a research focus that suited the RYSE objectives. However, once I had chosen a focus that corresponded with RYSE's focus on the resilience of adolescents from a community affected by the petrochemical industry, I was able to choose a qualitative research design and the associated research methods. My study (of limited scope) is concerned with how older adolescents from a community impacted by the petrochemical industry, explain resilience in the face of unemployment. As explained in Chapter 1, from the preliminary RYSE data generated from participants in 2017 (Ungar & Theron, 2018), experiences of unemployment emerged as one of the biggest challenges associated with the petrochemical industry and township living that (older) adolescents faced. As I explain later in this chapter, I chose a phenomenological research design and used qualitative methods. RYSE has established a Community Advisory Panel (CAP) in eMbalenhle. As in other studies of resilience (see Cameron, Theron, Ungar, & Liebenberg, 2010; Gagnon, Sullivan, Lane, & Paré, 2016; Prince-Embury, 2013; Theron, 2013, 2015; Whitewater, Reinschmidt, Kahn, Attakai, & Teufel-Shone, 2016), the CAP are representatives from the participating community (in this case eMbalenhle), who collaborate with the researchers (the RYSE team) in order to advise the researchers on how to involve community members and facilitate research (La France & Crazy Bull, 2009). In addition, the CAP "has the potential to meaningfully shape studies of resilience in ways that will support communities' capacity to conceptualise and promote resilience" (Theron, 2013, p. 3). The CAP also assists with research implementation and procedures around data collection (Whitewater et al., 2016). Consequently, I did

not recruit participants as this was the responsibility of the CAP. I did give the CAP the relevant criteria for selecting participants for my study (see 1.8.3). On the 13th of April 2018, my fellow researchers and I met with the RYSE team to receive training for data generation. On the 14th of April, my fellow researchers, as well as the RYSE project manager, travelled to eMbalenhle to meet with our participants and conduct the data generation process. I facilitated the data generation process with my participants by using the draw-and-talk method (Guillemin, 2004) and holding an informal group discussion, as not all the participants were comfortable with drawing. With the participants' permission, I audio recorded the data generation, which I then personally transcribed. Once I had transcribed the data, I analysed it using thematic data analysis. On the 31st of May 2018, I presented my candidate themes to my fellow researchers. After receiving feedback from my fellow researchers, I went back and reviewed the data. On the 12th of October 2018, I presented my findings to the RYSE team and to the CAP in a member check meeting. This member check meeting was conducted in order to enhance the credibility of my findings (Morse, 2015). The member check meeting is detailed later in this chapter in the section on quality criteria (section 3.6). The data that my participants and I generated were shared with the RYSE project and were used to provide answers to my research question.

3.3 PURPOSE OF MY STUDY

Within the more expansive RYSE study, the purpose of my qualitative sub-study is to explore how older adolescents from the eMbalenhle community explain resilience in the face of unemployment. As such, the aim of my study was exploratory. According to Singh (2007) exploratory research is emergent. It explores the research phenomenon and focuses on gaining a better understanding of the phenomenon, rather than solving a research problem. There are advantages and disadvantages to exploratory research. Advantages of exploratory research include flexibility and adaptability, as well as building the foundations for potential future research of a phenomenon (Dudovskiy, 2018). Due to the inductive nature of exploratory research, findings emerge from the data, and there are typically very few expectations from the findings of this type of research (Rendle, Ambramson, Garrett, Halley, & Dohan, 2017). Exploratory studies tend to be associated with new or underexplored areas of research (Singh, 2007). To my knowledge, there is no prior research on how older adolescents explain resilience in the context of a petrochemical environment and in the face of unemployment. Thus, an exploratory study is appropriate for my research. Furthermore, an exploratory qualitative study is advantageous because it allows the researcher to generate new knowledge and understanding of a previously

underexplored phenomenon, from the perspective of the participants' experience (John, Knott, & Harvey, 2018). An exploratory study was advantageous for my research because exploring the participants' lived experiences through their explanations of resilience, in the face of unemployment, allowed me to gain a deeper understanding of this phenomenon. The disadvantages of exploratory research include the fact that the data and data interpretation can be subject to bias and the small sample sizes may not accurately reflect the views of the community or individuals being studied (Dudovskiy, 2018). In order to avoid bias, I adopted the quality criteria explained in section 3.6. I was also aware that I was only gaining an understanding of my participants' explanations, and that generalising my findings was not the aim of my study.

3.4 PARADIGMATIC PERSPECTIVE

3.4.1 EPISTEMOLOGICAL PARADIGM

Interpretivism was a reaction to the restrictions associated with the positivist paradigm (Morgan & Sklar, 2012). Interpretivism is largely influenced by hermeneutics, which is the study of meaning and interpretation (Mack, 2010). Phenomenology also shaped the development of interpretivism. Phenomenology supports the idea that people's subjective interpretations and perceptions of the world are the basis for understanding social phenomena (Nieuwenhuis, 2016). Further, interpretivists assert that reality is a social construct that hinges on people's perceptions of reality, as well as the meaning they give to the experiences and relationships they have in the world (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014). Consequently, interpretivism argues that truth and knowledge are subjective, and that facts are dependent on culture, context, and human interpretations of the information they have (Nieuwenhuis, 2016). A researcher guided by the interpretivist perspective aims to ascertain how other people understand the research phenomenon, and the meaning they ascribe to that phenomenon (Morgan & Sklar, 2012). The interpretivist perspective is influenced by the concept of *Verstehen* that basically means "to understand something in context" (Holloway & Wheeler, 2010, p. 4). This concept emphasizes the importance of empathetic understanding of events or experiences, as opposed to finding explanations for them (Mack, 2010). The focus of my study was to explore how (older) adolescents, from the eMbalenhle community, explain resilience in the face of unemployment. In order to explore these (older) adolescents' explanations of resilience, I needed to develop an insider view of their understandings of resilience in their specific context; this "understanding in context" is in line with the interpretivist perspective. As the interpretivist approach aims to gain an

in-depth understanding of a phenomenon, a limitation of the approach is that it is often time-consuming and the research cannot be replicated (Daymon & Holloway, 2010). Further, if the researcher fails to adequately describe the participants and their context, other researchers will not be able to accurately apply the research to their studies (Malterud, 2001). In order to manage this limitation, I have described my participants and their context in detail in Section 3.5.2. Another limitation associated with interpretivism is that researchers make subjective assumptions when beginning their research (Mack, 2010). Therefore, it was important for me to include my assumptions from the initial phases of research in order to analyse my findings objectively (Williams, 2000). For example, I assumed that older adolescents would define resilience in the face of unemployment as both an interpersonal and intrapersonal process. Further assumptions have already been discussed in Chapter 1, Section 1.7.

3.4.2 METHODOLOGICAL PARADIGM

A large selection of research methods and theoretical approaches fall under the qualitative research paradigm (Povee & Roberts, 2014). Qualitative research is widely used across a range of disciplines, and therefore various definitions exist (Van den Berg, 2008). Qualitative research is an inquiry into social reality (Lavy et al., 2014); it is naturalistic (Basit, 2010), interdisciplinary, and consists of various perspectives and ways of producing knowledge (Van den Berg, 2008). Qualitative research is typically defined by its aims; these aims are designed to develop an understanding of the participants' attitudes and experiences relating to the research phenomenon. The aims of my study were compatible with the qualitative paradigm as my study aimed to gain deep insight into human perceptions of resilience. In qualitative research, the quality of the data collection process is extremely important, as the data need to be interpreted by the researcher (McCusker & Gunaydin, 2014). Since the quality of data collection is dependent on the researcher, the researcher is the primary tool for research (Tufford & Newman, 2012). This can provide challenges to qualitative research, especially if the researcher and participant differ in social standing, or do not share the same language (Du Plooy-Cilliers et al., 2014). In my study, I ensured that I treated the participants with respect, and informed them that they were the experts on this topic, and I was there to learn from them. In addition, the RYSE project manager assisted with a few necessary language translations, as the mother tongue of the majority of the participants is isiZulu, and the project manager is fluent in that language.

As the nature of qualitative research is naturalistic, it allows for a comfortable atmosphere where participants can share their insights in their natural setting (Du

Plooy-Cilliers et al., 2014). However, gathering, analysing and interpreting data can be demanding, stressful, and time-consuming for researchers (Basit, 2010). Qualitative research is also expensive (Anderson, 2006), particularly if the research site is far away from the researcher. As a result, it was extremely useful to be part of a larger, funded, research project (the RYSE project). Furthermore, building and sustaining rapport with participants can provide an additional challenge to the researcher as lack of rapport can affect the quality of data collected (Kwan & Manaf, 2001). To build rapport with my participants, I engaged them in an icebreaker before the data generation process. Rimando et al. (2015) explain that using an icebreaker before data generation can put the participants at ease and create more of a relaxed atmosphere between the participants and the researcher. The icebreaker I used was a variation of a traditional South African story-telling game called *mas'kitlana* or *xoxisa* that many black South African children play using rocks or stones (Harrop-Allin, 2014). The RYSE team advised me to use this game as an icebreaker, as it would resonate with the participants. Further challenges to qualitative research are trustworthiness and rigour (Morse, 2015). In order to enhance the rigour of my research, I used the original data for analysis. I also followed the American Psychological Association's (APA) standards for qualitative reporting to guide my research findings (Levitt et al., 2018). The data were checked against the initial working assumptions of my study, as well as by the supervisors involved in the larger RYSE project.

3.5 METHODOLOGY

3.5.1 RESEARCH DESIGN

Phenomenology is a philosophical movement that was initiated by Husserl at the beginning of the 20th century. Phenomenology explores subjective, conscious experience (Smith, 2013). Phenomenology aims to discover the common features, or what Husserl termed "universal essences," of phenomena as they are experienced (Shosha, 2012). Participants' explanations of a phenomenon (in this case resilience) are embedded in their specific, personal experience of that phenomenon, as well as the meaning they ascribe to that phenomenon (Flood, 2010). In my study, I asked my participants, who reside in eMbalenhle, to explain resilience in the face of unemployment. Consequently, explaining resilience in this context caused my participants to draw on their experiences of resilience, and allowed me a deeper understanding of resilience from the participants' perspective. This approach fits with the interpretivist paradigm because it gave me the "potential to generate new

understandings of complex multidimensional human phenomena” (Ajjawi & Higgs, 2007, p. 614) through my research.

Phenomenological research is both inductive and descriptive (Bloor & Wood, 2006; Flood, 2010). My study used the descriptive phenomenological approach (Balls, 2009) as its research design. Descriptive phenomenology aims to show how people understand and create meaning from a phenomenon (Finlay, 2009). In descriptive phenomenological research, data are mainly collected and analysed through naturalistic methods such as conversation recordings, stories and/or observations of the research participants’ experience of the relevant phenomena (Balls, 2009; Fouché & Schurink, 2011). Two to ten participants are sufficient for a descriptive phenomenological study, as the emphasis is on the quality and depth of the data, rather than the quantity (Groenewald, 2004). In keeping with the above, my study was conducted with a small group of participants (seven in total) and then I extracted what was common and what was exclusive to their explanations of resilience.

In keeping with the traditional trend of scientific rules of research, descriptive phenomenology tries to preserve objectivity and includes the idea of “bracketing.” This concept asks the researcher to declare and shed preconceptions, assumptions, and personal biases of phenomena in order to objectively explore data and results (Balls, 2009; Shosha, 2012). Bracketing also involves taking steps to ensure that the findings of a phenomenological study result from the descriptions of experience provided by participants, as opposed to researchers’ own presumptions and expectations (Tufford & Newman, 2012). However, as the nature of a phenomenological research design focuses on participants’ subjective experience, it can be difficult for researchers to bracket off their own personal experiences or preconceived ideas (Creswell & Poth, 2018). In order to ensure that I did not interpret the data with any assumptions or preconceived ideas, I followed Creswell’s recommendations (2013), where, in Chapter 1, I stated and acknowledged my assumptions which were based on personal experience. In addition to this, I consulted with the CAP in a member check meeting to confirm my interpretation of the data did not result from my own personal assumptions (Morse, 2015). Personally, I did find it quite difficult not to react to the participants’ descriptions without sympathy, or to relate to them with my own experience. However, I did manage to avoid this type of reaction by remaining cognisant of the impact this type of reaction would have on my data, and as a result of the training I received from RYSE.

An advantage of phenomenological research design is that it allows for rich, thick descriptions of experiences that give the reader real insight into the experience of a phenomenon (Creswell, 2014). One disadvantage of phenomenological research is accuracy of descriptions; a verbal description of an experience is already different from the experience itself. In order to paint an accurate picture of the non-verbal experience, my study also utilised drawings to depict participants' explanations of resilience. In order to manage the limitations, the findings of my study were checked by the participants, as well as members of the CAP and my supervisors within the greater RYSE project. Further detail of how I managed the limitations of my phenomenological study is discussed in the section on quality criteria (Section 3.6).

3.5.2 PARTICIPANTS

The RYSE project has a CAP that recruits participants. As my study is a part of RYSE, the CAP recruited participants for my study on my behalf. A CAP is formed when researchers invite members of the community to assist in the research process in order to privilege the voices within that community (Theron, 2013). The CAP generally helps with recruitment of participants and with implementing and recognising issues with the research procedure. The CAP also provides insight into the community's culture (Silvestre, Quinn, & Rinaldo, 2010).

My study made use of purposive sampling. Purposive sampling involves looking at a group of people and choosing participants that have specific characteristics directly related to the research question (Pascoe, 2014). As I required participants who met specific criteria for my study (see 1.8.3), I asked the CAP to recruit older adolescents, between the ages of 18 and 24 years old, who reside in eMbalenhle, and who were comfortable participating in English medium research. In addition, the participants needed to have either direct or indirect experience of unemployment and not be employed at the time of my study. One of the advantages of purposive sampling is that the sampling criteria align with the study. Thus, the purposefully sampled participants are able to provide insights appropriate to the research (Acharya, Prakash, Saxena, & Nigam, 2013). Further, as the participants were purposefully chosen, they provided rich real-life experiences as data for my study (Nieuwenhuis, 2016). These experiences fit with the purpose of my study because the participants' lived experience contributed to their explanations of resilience, and as such, provided me with a much deeper understanding of resilience from the participants' perspectives. A limitation of purposive sampling is the researcher's subjectivity and bias in selecting participants, as the researcher may make assumptions about participants (Etikan, Musa, &

Alkassim 2016). However, if participants are not chosen with enough caution, the researcher may only have access to people that cannot contribute to the study (Merriam, 2009; Nieuwenhuis, 2016). In order to guard against these limitations, I asked the CAP to recruit participants who had expert knowledge of the phenomenon and remained cognisant of my potential bias at all times (Tongco, 2007). In addition, findings of research that uses purposive sampling cannot be generalised outside of participants who are similar to the sample (Acharya et al., 2013; Hycner, 1985). Purposive sampling was valuable for my specific study because I was only interested in how older adolescents, from eMbalenhle who have direct/indirect experience of unemployment, define resilience, so, to sample outside of these criteria would not have been useful. As such, the inability to apply generalisability to my findings was not a disadvantage in my research.

Purposive sampling is typically linked to the aim of data saturation (Van Rijnsoever, 2017). Data saturation refers to the idea that the researcher has reached “data adequacy” (Morse, 1995, p. 147) and is at “the point in saturation where no new or relevant information emerges” (Saumure & Given, 2008, p. 196). In addition, the sample size needed to reach data saturation depends on the context and the content that is being explored (Saunders et al., 2018). In a phenomenological study, two to ten participants are usually sufficient to achieve data saturation (Groenewald, 2004). In my study, seven participants contributed to data generation and, as I report in Chapter 4, my participants all had similar explanations of resilience in the face of unemployment. Therefore, I was satisfied that I managed to reach data saturation with my participants.

As summarised in Table 3.1, my participants were all male, and their average age was 19 years old (In section 5.4 I reflect on the limitations of an all-male sample and possible reasons for the gender-biased composition of my sample). The majority of my participants described themselves as black, Zulu-speaking adolescents, and one identified as a black, Pedi-speaking male adolescent. The participants were given the choice to use their real names or a pseudonym, and only 2 participants preferred to use a pseudonym, while the rest of the group gave permission for me to use their real names as indicated on table 3.1. Most of the participants were either in matric or had previously completed matric (one participant completed his school in Grade 7). The participants who had achieved matric were in the process of trying to better their matric results to improve their chances at employment. All the participants had experience with unemployment in their community, either personally, or through friends or family. Further, all the participants felt they had to achieve the very best possible matric results

in order to find employment themselves. The participants had a variety of interests including music, skateboarding and education.

Table 3.1: Description of participants

Name	Age	Home Language	Employment status (seeking work?)	Have you ever been financially compensated for work that you have done?	Experience of unemployment direct/indirect?	Student (level?)
Siyanda Mthiunye	18	isiZulu	Unemployed	-	-	Upgrading Grade 12 marks
Spikes (pseudonym)	19	isiZulu	In School	No	Indirect	High School Grade 12
Sinethemba Masilela	19	isiZulu	School	No	Indirect	High School Grade 12
Sipho Mashini	18	isiZulu	Unemployed	Worked sometimes for family business selling tyres	Direct Indirect - parent	Highest grade completed: Grade 7
Kgomotso Moagi	20	sePedi	In school	No	Indirect	School Grade 11
Skriller (pseudonym)	20	isiZulu	In school	No	Indirect	Grade 12
*Karabo Maseko	19	isiZulu	*	-	-	

The participants all resided in the township of eMbalenhle (see Figure 3.1). eMbalenhle is the township linked to the town of Secunda, in the Govan Mbeki District in Mpumalanga. The population census in 2011 documented that the Govan Mbeki district had a population size of 294,538 people; the population estimate of 2016 shows that the district's population was estimated to have grown to 340,091 (citypopulation.de, October, 2018; Statistics South Africa, 2018a). The Govan Mbeki district, and more specifically eMbalenhle, faces a number of challenges, namely: economic, environmental as well as socio-political. Specific challenges to the people

* This participant preferred not to disclose his employment status but was in consensus/agreed (verbally and non-verbally) with all statements relating to experiences of unemployment.

of eMbalenhle include pollution from close proximity to the Sasol plant, health challenges (Kasanga et al., 2017), housing and infrastructure, including faulty sewage systems (A. Currie, 2017), lack of job opportunities (Oosthuizen, 2018), violence and crime (Makhaza, 2018; Oosthuizen, 2018). According to the 2011 Census from Statistics South Africa, eMbalenhle is challenged by poverty and low income as only an average of 39% of the population in the Gert Sibande district (where eMbalenhle is situated) earn more than R3200 per month (Statistics South Africa, 2011).



Figure 3.1: eMbalenhle township (Photo courtesy of the RYSE team)

3.5.3 DATA GENERATION

For data collection, I sat with a group of seven participants and with a member of the RYSE team in the venue to aid with translations. I aimed to use an arts-based participatory activity. This approach focuses on participation from the participants in the study through the arts-based activity (Coad, Plumridge, & Metcalfe, 2009). The specific activity I aimed to use in my study was photo-elicitation. Photo-elicitation is a research method that uses photographs to elicit information from participants (Harper, 2002). The method I sought to use with my group, was to ask the CAP to ask the participants to bring their own photographs to the meeting, and then use their photographs to create group dialogue (Clark-Ibáñez, 2004). To this end, the brief that the cap used was: Please bring 5-10 photos (e.g. on your cell phone) and/ or objects that help you to explain what it means for a young person to be okay when they are unemployed or, someone they know is unemployed. Photo-elicitation can be extremely useful for research, as different parts of the brain are used for processing images, so images can often access deeper parts of human consciousness, memory

and experience (Croghan, Griffin, Hunter, & Phoenix, 2008; Liebenberg, 2018). As such, photographs can provide researchers with dense descriptions of a particular phenomenon. In participatory research activities, visual activities can also often uncover what is hidden or lost in verbal or written communication alone. However, it is important to remember that visuals or photographs are used to facilitate the discussion (Coad et al., 2009). Using the photo-elicitation technique, I hoped the artefact (photograph) would lead to the desired conversation about how these older adolescents explain resilience in the face of unemployment. However, the nature of qualitative research is emergent (Morgan, 2008), and fortunately I had been informed by the more seasoned researchers involved in the RYSE project, that it was possible that participants could arrive without photographs. This was indeed the case, because the confirmed participants did not arrive, and the CAP had to recruit other suitable participants for my study on the day of data generation. Due to this, I could not use photo-elicitation because it requires preparation prior to the day of data collection. However, I was prepared for this possibility, and was able to ask the participants to draw pictures to motivate an informal group discussion (Gameiro, De Guevara, El Refaie, & Payson, 2018; Guillemín, 2004). Group discussions are also recognised for producing richer data than other research methods, as they are often explorative (Seabi, 2012).

The brief I used in conjunction with the drawing activity was as follows: Please draw a picture of anything that symbolises [helps you explain] resilience [that is, what supports you, or someone you know, to be strong when faced with unemployment and life is hard]. To make the drawings, I provided the participants with pens, crayons and paper. I told my participants that artistic talent was not necessary to complete the drawings. However, only two participants chose to draw, and the rest of the participants were eager to start the discussion without engaging in drawing. While the participants who chose to draw decided what they would draw, and were then focused on completing their drawings, I invited the remaining participants to discuss how they would explain resilience in the face of unemployment. In retrospect I considered whether this meant that I used a focus group methodology, because the discussion was focused (i.e. resilience in the face of unemployment) and involved a small group (O.Nyumba, Wilson, Derrick & Mukherjee, 2018). However, I decided that because the group members were mostly inclined to respond through me (rather than have a focused conversation with each other) that a group discussion that was strongly led by me is the more accurate term. I do not call what happened a group interview because

I did not formulate interview questions or use an interview guide to initiate conversation (Kallio, Pietila, Johnson & Kangasniemi, 2016). Instead, I used the drawings and/or brief to prompt a discussion. I also asked the participants probing questions, and encouraged them express whether or not they agreed with each other's explanations of resilience in the face of unemployment (Gameiro et al., 2018).

The two participants who made a drawing took about 10 minutes to complete their drawings (see Figure 4.2 for an example) and then I asked these participants to use their drawings to explain what they understood resilience to mean in the face of unemployment. As a group, we then discussed what the participants' drawings explained about resilience in the face of unemployment and I asked probing questions within the group. We also further discussed the insights that those who had not drawn had contributed, and further questions were used to generate richer data. In qualitative research, a probing question is an inductive, unrehearsed question built on the participant's preceding answer (Guest, Namey, & Mitchell, 2013).

The advantages of using a combination of visual and verbal techniques to collect data are that this combination stimulates richer conversation, reduces awkwardness and helps improve rapport between the researcher and the participants. This technique also helps the participants to collect and order their thoughts (Thygesen, Pedersen, Kragstrup, Wagner, & Mogensen, 2011). Creating visual representations can also assist the participants in providing dense descriptions of their experience (Harper, 2002). As Mitchell et al. (2011), recommend in "a reassuring invitation to draw" (p. 23), I was reassuring participants that artistic talent was not necessary to create drawings, because the focus was on their content. Furthermore, as part of "a leisurely pace," Mitchell et al. (2011, p. 24) suggest spending a full session getting to know participants before inviting them to create a drawing. My participants arrived two hours after the arranged time for the group discussion, and my research team had only planned to travel to eMbalenhle for one day. This meant my data generation process had some time constraints. These time constraints did not allow for me to spend a full session building rapport with my participants. As a result, these limitations could have contributed to the participants' unwillingness to create drawings. Guillemin (2004) also suggests that participants' reluctance to draw could be a result of "previous experiences of the ways in which the participants have come to make sense of events in their lives" (p. 285). Guillemin (2004) notes that participants' primary source of expression is usually verbal, and as such, the participants may find it difficult to explain feelings and concepts through drawings. Furthermore, research (Dlamini,

2016) indicates that isiZulu speaking young men, who reside in South African townships, often gather informally in groups and engage in conversation at the end of the day. Therefore, a group discussion, rather than a drawing, could have been a more natural and comfortable way for some of my participants to relate their experiences of resilience in the face of unemployment.

3.5.4 DATA ANALYSIS

The above activity was recorded and transcribed verbatim and this constituted data. I also took a photograph of participants' drawings with their permission, and this constituted further data. For the analysis of these data, I used inductive, thematic content analysis. Thematic content analysis examines the data to identify a recurring phrase, word or concept, which is then assigned a code. Once identified across the data set, the assigned researcher sorts the identified patterns into themes (Guest, MacQueen, & Namey, 2012; Silverman, 2014). Braun and Clarke (2006) provide a six-step guide for conducting thematic content analysis.

- Familiarising yourself with the data

During this phase it is important to start taking notes for initial coding. The process of transcribing helps the researcher to become familiar with the data (Braun & Clarke, 2006). In order to familiarise myself with the data, I listened to the audio recording of the participants involved in my study multiple times. I also personally transcribed the audio recordings: this involved listening to sections of the audio recording, stopping the recording to transcribe each section, and then listening again in order to check the accuracy of my transcription. Furthermore, I checked the final transcription against the audio recordings as recommended by Braun and Clarke (2006) and I read through the data transcriptions twice before beginning to code.

- Generating initial codes

A code is a word or phrase that summarises pieces of data that answer the research question (Silverman, 2014). In qualitative research, there is generally a large amount of data, so researchers only code data that is relevant to the research question (Creswell, 2014). To code, I went through my data and assigned an open code (see Appendix A for a complete list of open codes) to each piece of data that was relevant to my research question (Creswell & Poth, 2018). I used the qualitative data analysis software programme Atlas.ti version 8 to manage and organise the coding process and the coded data (Silverman,

2014). Figures 3.3 and 3.4 show examples of my open coding process. An open code is a label or phrase that summarises what a piece of data says that is relevant to answering my research question (Creswell & Poth, 2018).

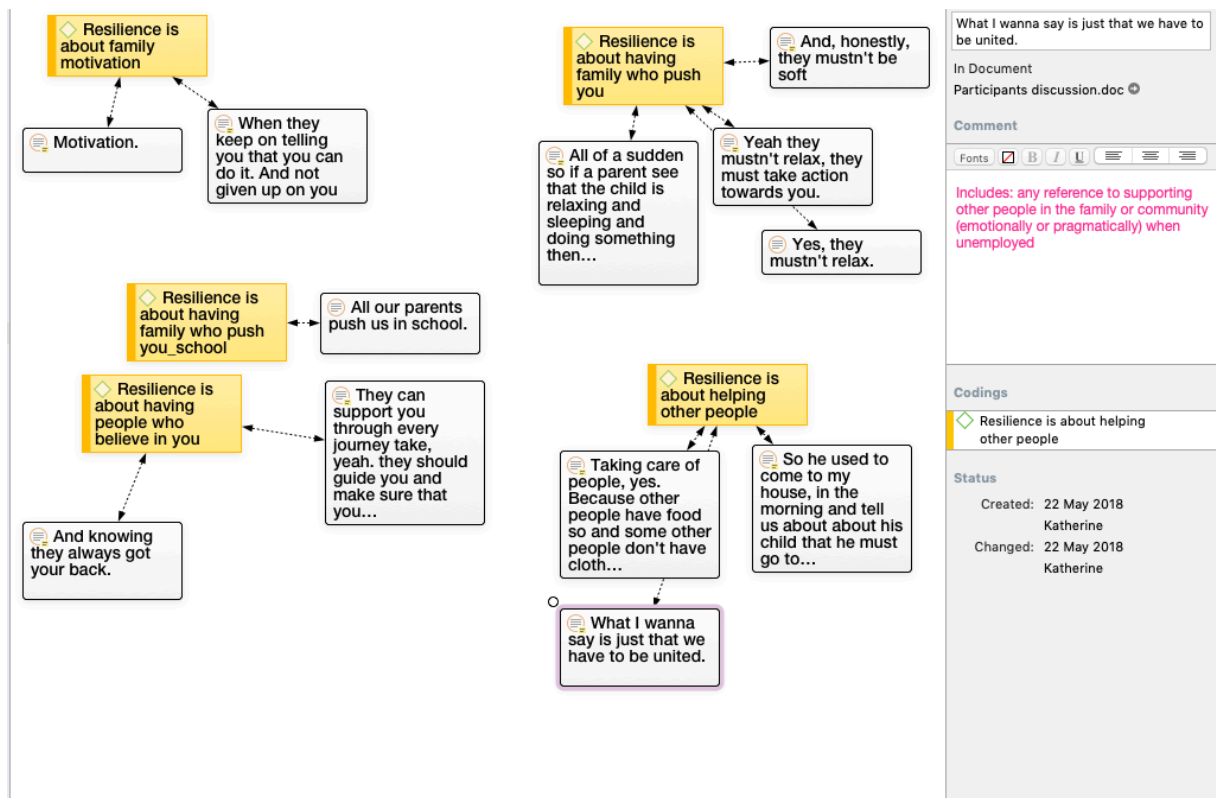


Figure 3.2: Screenshot of a code network from Atlas.ti 8 illustrating my open coding process (resilience is about drawing on social support)

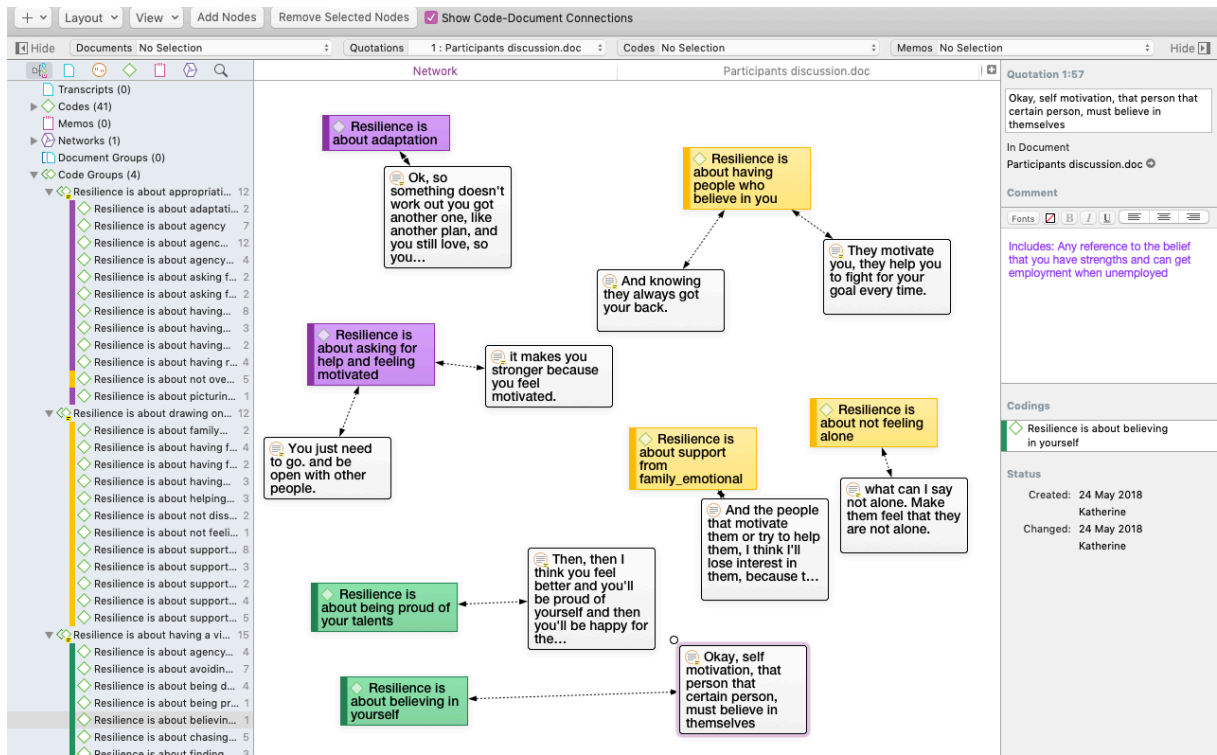


Figure 3.3: Screenshot of a network from Atlas.ti 8 illustrating how I moved from open coding to code groups

- Searching for themes: A theme is something significant in the data that relates to the research question and represents a recurring response within the data set (Braun & Clarke, 2006). I grouped similar open codes into groups relating to possible themes using the code group function in Atlas.ti version 8. Figure 3.4 and 3.5 show examples of how I grouped my open codes into themes. The codebook that I include as Appendix A shows all code categories.

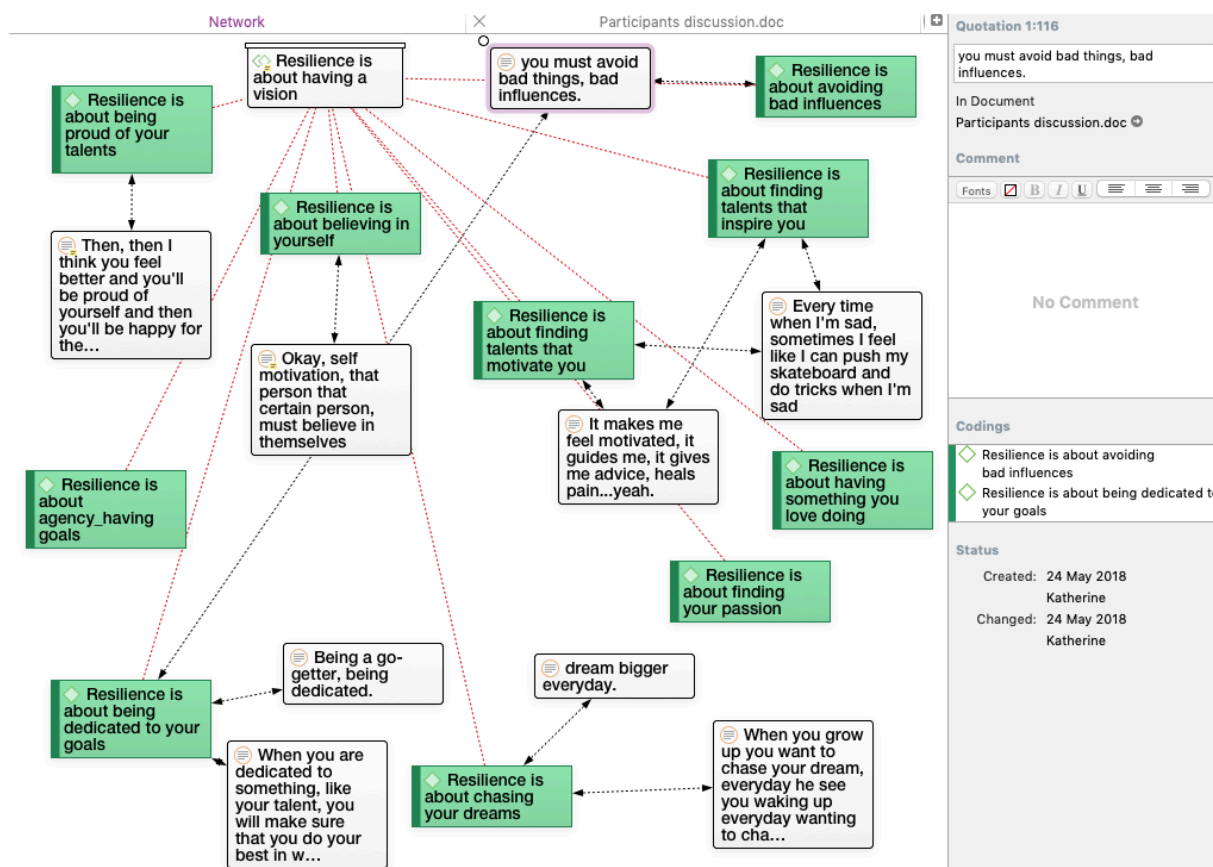


Figure 3.4: Screenshot of a code network from Atlas.ti 8 illustrating how I moved from open coding to code groups [in this example, all the included codes related to having a vision]

- Reviewing themes: This involves going through the themes to see which have sufficient data to support them, and generating a thematic map (Vaismoradi, Turunen, & Bondas, 2013). After creating code groups (see Figure 3.6), I looked for the codes which had the most and/or richest evidence to support possible themes and then created candidate themes. I then presented these candidate themes to my fellow researchers and supervisor in a PowerPoint presentation.
- Defining and naming themes: The researcher analyses and refines the themes to create clear definitions that explain their contribution to the research (Braun & Clarke, 2006). After presenting my candidate themes to my supervisor and fellow researchers, I used their feedback as well as my own discretion to define and name the themes. For example, before I finalised the name for my theme of “drawing on social support,” I considered labelling the theme “give and take.” However, this name and definition was not a strong enough fit for the evidence. As the evidence described social support that participants utilised to enable resilience, I thought about using “social support,” but this name was not descriptive enough and lacked a verb. I subsequently decided on “drawing on

social support” as a name for that theme. I then presented to the CAP and used their comments to support the refinement of my themes.

- Producing the report: This is when the researcher writes up the final themes in order to produce a scholarly report of the findings. In the report, the researcher must convince the reader of the merit and validity of the analysis, by linking the data to existing literature (Braun & Clarke, 2006; Vaismoradi et al., 2013). In Chapter 4, I detail the validity and merit of my analysis by connecting my findings to existing research.

Trustworthiness is one of the main disadvantages in thematic content analysis as it involves a fair amount of interpretation of text to define themes (Guest et al., 2012).

3.6 QUALITY CRITERIA

The five quality criteria used in qualitative research are: credibility, dependability, transferability, confirmability and authenticity (Creswell & Poth, 2018). These criteria will be discussed individually in the following subsections.

3.6.1 CREDIBILITY

In qualitative research, credibility refers to how believable the findings are. In order to enhance credibility in my study, I used a well-established research design (phenomenological), and I aligned my research question with appropriate methods, my research design, my research methods and theoretical underpinning (Nieuwenhuis, 2016). Furthermore, my findings were checked by my fellow RYSE researchers through a PowerPoint presentation. In addition, my findings were also presented to the CAP using an updated PowerPoint presentation. My findings were discussed with the CAP (Polit & Beck, 2012) in a member check meeting on the 12th of October 2018 at the University of Pretoria (See Figure 3.2 and 3.3).



Figure 3.5: My fellow researchers and I listening to the CAP give feedback on my research findings (Photograph courtesy of the RYSE team)



Figure 3.6: The CAP discuss my findings while my supervisor (Prof. Theron) and a fellow researcher listen in. (Photograph courtesy of the RYSE team)



Figure 3.7: The CAP and the RYSE team after the member check meeting on the 12th October 2018 (Photograph courtesy of the RYSE team)

3.6.2 DEPENDABILITY

Dependability can be defined as the degree to which the findings of the study can be repeated by others (Denzin & Lincoln, 2018; Lincoln & Guba, 1985). Nieuwenhuis (2016) explains that established credibility can increase dependability. Dependability is shown through the research design and implementation of the process, as well as data generation, data analysis and reflections. In order to demonstrate dependability, I have documented my analysis using screenshots (see Figures. 3.3, 3.4, 3.5 and 3.6) and an audit trail as evidence (Appendix A). In addition, I have included my thought process regarding inclusion and exclusion criteria when coding (see Appendix A).

3.6.3 TRANSFERABILITY

Transferability rejects generalisability as an aim of research and refers to the ability of the research findings to fit individuals in different contexts (Nieuwenhuis, 2016). Cope (2014) states that in order for a study to meet this criterion, other people who are not involved in the study need to know enough about the study to decide whether the results could be meaningful to people in a completely different context. For this reason, I provided a “thick description” of the participants using the information I had available (see Table 3.1). A “thick description” is an accurate, detailed description used to create meaning for readers outside of the context of that research (Ponterotto, 2006). Furthermore, I created a thick description of the context (i.e., eMbalenhle) to make sure that my results comply with this criterion (see Figure 3.1).

3.6.4 CONFIRMABILITY

Confirmability describes the researcher's ability to remain neutral and allow the participants to guide the research findings (Nieuwenhuis, 2016). In order to heighten confirmability, I admitted my assumptions prior to and after analysis. I have also provided an audit trail in Appendix A. Audit trails allow others to judge whether/how assumptions might have influenced the coding process (Polit & Beck, 2012).

3.6.5 AUTHENTICITY

The authenticity of a study can be understood as the reliability of the researcher's data sources, for example the extent to which the participants were able to realistically represent themselves (Yin, 2016). In order to provide an authentic account of the knowledge my participants communicated, I included the voices of all of the participants in my research and I used direct quotes from the transcript. In addition, I was careful not to marginalise specific participants, and ensured that all participants had equal opportunities to share their thoughts and opinions (Creswell & Poth, 2018).

3.7 ETHICAL CONSIDERATIONS

As my study is part of the RYSE project, the Ethics Committee, Faculty of Education provided the necessary ethical clearance (UP 17/05/01). I was granted associated ethical clearance for my specific sub-study, which is how older adolescents explain resilience in the face of unemployment. To view my ethical clearance certificate, see Appendix C. Similarly, as mentioned earlier, the RYSE project has a CAP that takes care of recruitment: they handled the consent process. I accepted this process of recruitment as I was aware that the RYSE team trained the CAP to recruit participants ethically. A blank copy of the consent form is given in Appendix B.

In addition to the above, I needed to respect the ethical principle of beneficence. Beneficence involves the idea of ensuring that participants will experience no harm (Hammersley & Traianou, 2012). As the data collection for my study was done in a group, I could not guarantee to my participants that they would have absolute anonymity, and I informed participants of this. Harm from non-anonymity includes asking questions that cause embarrassment, and this could affect the way one participant is viewed by the other participants. I also made the participants aware that they have a mutual responsibility to protect each other's privacy (Louw, 2014). In order to protect participants' confidentiality, the CAP supplied them with a consent form that gave the participants the opportunity to select their level of anonymity. The consent

form (see Appendix B) gave the participants the choice as to whether their real names or a pseudonym would be used in the research process. In addition, the consent form confirmed whether the participants were comfortable with me including photographs of their faces and their drawings in my research and all associated publications. The participants all consented to the use of photographs, and two of the seven participants preferred to use pseudonyms, while the remaining participants were comfortable using their real names (refer back to table 3.1). I also verbally checked whether the participants understood the consent form as well as the implications of their preferences. Thus, while there was potential for harm in my study, I made all reasonable attempts to counteract it.

Justice refers to equality and fairness and ensures that all participants are treated with equal respect in the research process (Flick, 2009). According to Dhai and McQuoid-Mason “the principle of justice considers whether the individual is properly treated within the larger picture” (2011, p. 15). Therefore, justice reminds the researcher to acknowledge the participants’ contribution to the study (Flick, 2009; Orb, Eisenhauer, & Wynaden, 2001). In order to acknowledge the participants’ contribution to my study, I greeted and engaged with the participants without judgemental, condescending or patronising behaviour (Beauchamp & Childress, 2009). I also reminded the participants that their input was extremely valuable to my research (Dhai & McQuoid-Mason, 2011). In addition, as a sign of courtesy, the participants in the RYSE project’s qualitative studies received a R100 voucher from Pick 'n Pay.

3.8 CONCLUSION

In this Chapter I described how I conducted my research in order to generate findings. Planning and documenting the research process was an extremely important and valuable part of my study. This chapter also described the research methodology that I used to answer my research question: *How do older adolescents, living in eMbalenhle, explain resilience in the face of unemployment?* The details of the findings that emerged from my research are discussed in the following chapter.

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Chapter 4

Analysis and Interpretation of Data

4.1 INTRODUCTION

My study of limited scope asked the question “How do older adolescents, living in eMbalenhle, explain resilience in the face of unemployment?” From the data gathered, three primary themes arose (as summarised in figure 4.1).

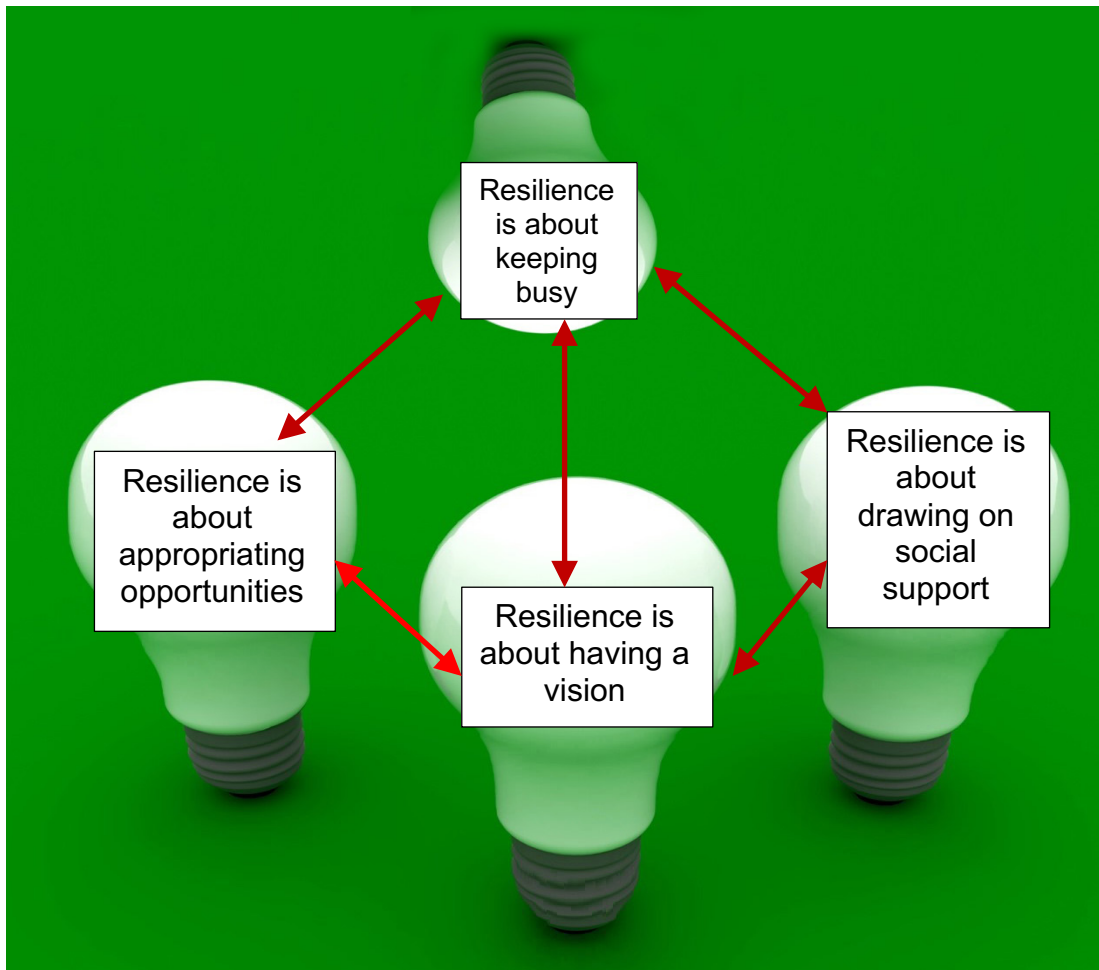


Figure 4.1: Visual summary of study’s findings

“Having a vision” was the most prominent theme, with all the participants supporting this notion. “Appropriating opportunities” and “drawing on social support” were supported equally by most of the older adolescents in the group (6 out of 7). As represented in Figure 4.1, “keeping busy” emerged as a notable outlier. Although it was not included in my initial assumptions, the idea of resilience being defined as “keeping busy” is apparent in the literature (for further discussion see section 4.2). Only three participants brought this up in their explanations of resilience in the face of

unemployment. In the sections below, I will report on each theme separately. I will also report on “keeping busy” as a possible outlier after the third theme.

4.1.1 THEME ONE: HAVING A VISION

Having a vision is defined as older adolescents having a strong picture of how they would like their lives to be. It is about knowing what their (older adolescents’) goals are, knowing and using their talents to achieve goals, and knowing and managing weaknesses so as not to jeopardise those goals. All the participants (7 out of the 7 older adolescents) reported having a vision in their explanations of resilience. Mostly, participants stated that having “a passion” that they could focus on and be dedicated to, gave them hope and motivation to keep going every day. As depicted in Figure 4.2, Spikes explained that whenever he is feeling low, he works on his music. He knows he is talented and sees his dedication to his talent as a path to a bright future. This “passion” keeps him on the right track and underpins his vision of using his talent “to get money” (i.e. make a living).

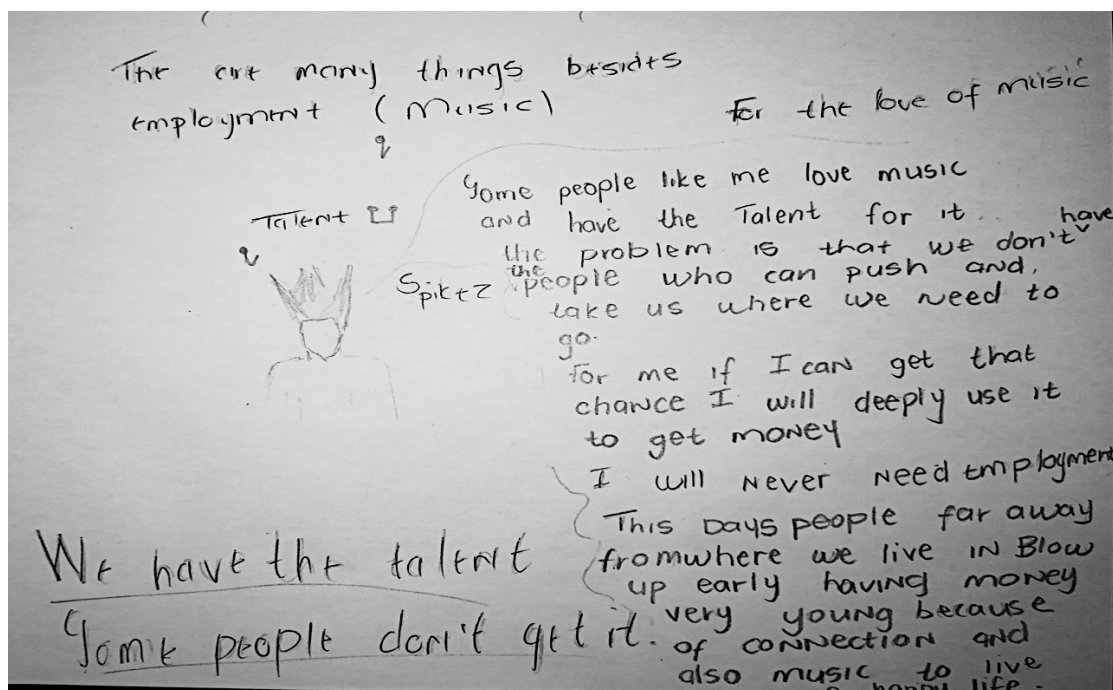


Figure 4.2: Spike’s drawing shows how he stays resilient by focusing on his talent*. Spikes says: *There are many things besides employment (Music). We have the talent. Some people don’t get it.*

* Some people like me love music and have the talent for it. The problem is that we don’t have the people who can push us and take us where we need to go. For me, if I can get that chance, I will deeply use it to get money. I will never need employment. These days people far away from where we live in blow up early, having money very young because of connection and also music to live a happy life. - Spikes

“Yoh! Music means everything to me. It gives me brightness, it makes me shine to other people and people love it and ja, that’s a motivation” (Spikes).

Similarly, Kgomotso stated that he believed chasing his dreams, and having a goal to focus on, would keep him out of trouble. This would also help him become successful in the future. Kgomotso explained that people should be dedicated to a future goal to stay strong:

“You must be a goal go-getter. Like for instance, you must avoid bad things, bad influences. Let’s say you want to, you are unemployed right, so you want to get to that point whereby you want to be successful ... Yeah, opportunities. Obviously, they are there, opportunities are always there ... Let’s say, when you are surrounded by people who aren’t chasing their dreams ... because there are like other people that, they don’t want to work. And other people want to hustle [try to make money] by maybe stealing, yes, so we must avoid those people ... [It is better] if you hustle through, let’s say through talent, and maybe learning.” (Kgomotso)

Sipho affirmed the idea that chasing dreams helps him to be strong. Sipho specified that imagining a successful future was a resilience-promoting factor in his life. Further, he noted that what motivated him was growing up in the eMbalenhle township without many resources, but believing if he works hard at his dream, he can achieve success and have the kind of life he wants.

“Successful is like when you grow up in the territory, like eKasi [the township] so. When you grow up you want to chase your dream, every day they see you waking up, every day wanting to chase your dream ... To me that’s successful ... Yeah, never give up, dream bigger every day.” (Sipho)

Skriller reiterated this theme by saying that having goals and working towards them, would keep unemployed older adolescents strong in the face of unemployment. He added that in order to work on these goals, older adolescents really need to believe in their talents and their ability to achieve.

“Okay I think, I think what makes them [those who are unemployed] strong is by never giving up on what they want to reach. Just keep on hustling, and keep on doing something every day, that’s going to inspire them not to give up and reach what they want to reach ... You see, when you believe in yourself, and you know what you want ... eh, you got to do everything, in order to reach what you want.” (Skriller)

The theme “having a vision” corresponds with international literature (Domhardt et al., 2015; Rosenberg et al., 2014; Smith, 2013; Sulimani-Aiden, 2017; Wilson et al., 2016) that states that having a hopeful vision encourages resilience among older adolescents. I also think that this theme fits with the idea that having a personal and social purpose allows for resilience among older adolescents (Ford & Smith, 2007; McKnight & Kashdan, 2009; Stein, 2008). I think having a personal and/or social purpose informs having a hopeful vision because it gives adolescents direction and allows them to paint a clear picture of their future and, as such, create a vision. Similarly, having future plans and goals fits with this theme of “having a vision” because these plans or goals guide adolescents along the path of materialising their vision. Having future plans or goals as a resilience-promoting factor among adolescents is an apparent theme in South African resilience literature (Hills et al., 2016; Lethale & Pillay, 2013; Malindi, 2014; Scorgie et al., 2017; Smit et al., 2015). Some South African resilience studies conducted among black adolescents living in situations of structural disadvantage (Smit et al., 2015; Van Breda, 2017; Van Breda & Dickens, 2017; Van Rensburg et al., 2018) also report having a vision for the future as a resilience enabler. However, none of these resilience studies appear to have been conducted among older adolescents challenged by unemployment.

4.1.2 THEME TWO: APPROPRIATING OPPORTUNITIES

Appropriating opportunities is defined as being aware that opportunities should always be taken. However, older adolescents believe that people need to actively look for opportunities and do everything they can to make the most of them. Older adolescents believe that they need to work to be successful and that opportunity is a stepping stone.

The majority of the participants (6 out of the 7) agreed that the theme of “appropriating opportunities” was part of their definition of resilience in the face of unemployment. Their view was that unemployed, older adolescents should be aware that opportunities can come from anywhere; they just need to find them. Siyanda said that if older adolescents take any opportunity that comes their way, they might get something better out of it, so long as they work hard and show the employers that they are good, dedicated workers. He said:

“Like when people are mostly unemployed, they get the little piece [part-time] jobs and you know the Sasol shutdown, some people get employed during the

*shutdown**. If they work hard, they automatically get the work and become maybe permanent somewhere” (Siyanda).

Likewise, Sinethemba referred to an unemployed friend who appropriated opportunity through him. Sinethemba’s friend was aware that Sinethemba’s dad works for Sasol. As such, he made the most of that connection and turned it into an opportunity.

“Ok there’s this friend of mine, we live in the same street, he’s unemployed. So my dad works at Sasol. So, he once asked me if I could speak to my dad if he can maybe find something for him there. So, I introduced him to my dad, then my dad helped him where he works. He gave them the forms to apply and stuff.” (Sinethemba)

Skriller used education as an example for appropriating opportunities. He stated that older adolescents with experience of unemployment should make the most of their opportunities, and use the support and resources that they have to further those opportunities and achieve the success they want from life.

“In life, we all got our own chances and we know what we want and ... eish. Okay, like okay. ... Let me make an example by education. You see they say education is the key to success. And it is the key to success, but some people take it for granted. That’s why they end up not reaching what they want” (Skriller)

This theme can be related to international resilience literature on using available resources (Pessoa, Coimbra, Noltemeyer, & Bottrell, 2017). I think that available resources provide opportunities for individuals to use and make something out of them; for example, a library is an available resource and also an opportunity to learn. The theme of “appropriating opportunities” also fits with the findings of South African resilience studies which indicate that having and using opportunities for growth and development, enable adolescent resilience (DeSilva et al., 2012; Goliath & Pretorius, 2016; A. M. Hall & Theron, 2016; Hills et al., 2016; Jefferis & Theron, 2017; Lau & Van Niekerk, 2011; Liebenberg et al., 2016). The following resilience studies that have reported the same theme, have also been conducted among black South African adolescents: Malindi and Theron (2010); Smit et al. (2015); Theron (2016, 2017). However, it should be noted that to my knowledge, there are no South African

* Shutdown is the local term for the annual period when Sasol halts operations for maintenance purposes. In this period, the industry takes on a large number of casual or temporary workers.

resilience studies done with older adolescents with experiences of unemployment who live a township that is adjacent to a petrochemical plant.

4.1.3 THEME THREE: DRAWING ON SOCIAL SUPPORT

Social support is defined as community and peer relationships that motivate older adolescents to be strong despite adversity. The participants spoke about two types of social support, namely: pragmatic support and affective support. Pragmatic support refers to the practical ways the community will help the adolescents, such as giving them money for transport. Affective social support refers to the emotional support that the participants experience, such as encouragement and motivation to achieve their goals. Both types of social support also help older adolescents to feel less isolated in their experiences of unemployment. The participants felt that if people believed in them, and were interested in what they were doing, then older adolescents would be more motivated to keep trying to achieve their dreams.

Most of the participants (6 out of the 7) felt that affective “social support” promoted resilience. Sinethemba explained that affective social support is an important part of being a community member. Feeling supported by neighbours makes adolescents feel strong and more capable of achieving something. Community support helps older adolescents feel encouraged to look for work. The older adolescents stated that the community will look after them if they are trying to find employment. This community support gives the adolescents the security needed to continue searching for a job, even when the search is discouraging. Sinethemba felt that it was important for older adolescents in the community to feel supported and not isolated when they experience unemployment.

“Okay, there’s a saying, but I only know it in Zulu. [Translation: A neighbour must take care of their neighbours] ... When you see that maybe your neighbour is, not suffering, but in need of something if you can you can give them whatever they need, or you feel that they are in need of, just to make them feel motivated and make them feel that you, um, what can I say not alone. Make them feel that they are not alone.” (Sinethemba)

Siyanda suggested that affective support from friends was a resilience-promoting factor. He explained that he supports his friends’ passions and motivates them to keep working on their goals, and they do the same for him.

Siyanda: *Ok it's like, to me like this guy [points to Spikes] said it. He [Spikes] likes music. Every time he's goes to the studio, when he comes back like, I want to hear that (Spikes') song. You see, every time he makes a song, I want to hear it.*

Me: *By [friends] being interested in what in what you love, they make you feel strong? ...*

So, you, you said you love skating? So, if you learn a new trick and you do it and your friends are watching you and they're like: 'Wow! That's amazing.' Does that make you feel good? Does it make you feel strong?

Siyanda: *Yeah very much, it's good.*

In the same way, Kgomotso felt that pragmatic support, such as practically assisting and sharing financial and other resources with other community members, was an extremely important part of building resilience. In Figure 4.3, Kgomotso's drawing depicts a person asking for financial help to get to a job interview. The shopkeeper is more than willing to help the person out, because he can see the person is motivated to work. Kgomotso also pointed out that in order for people to share amongst the community, they need to see evidence that adolescents are trying to find employment and are not just relying on the community to support them. He also explained that most older adolescents would be too ashamed to ask for help all the time, so if somebody were to help them, they would be more motivated to gain employment.

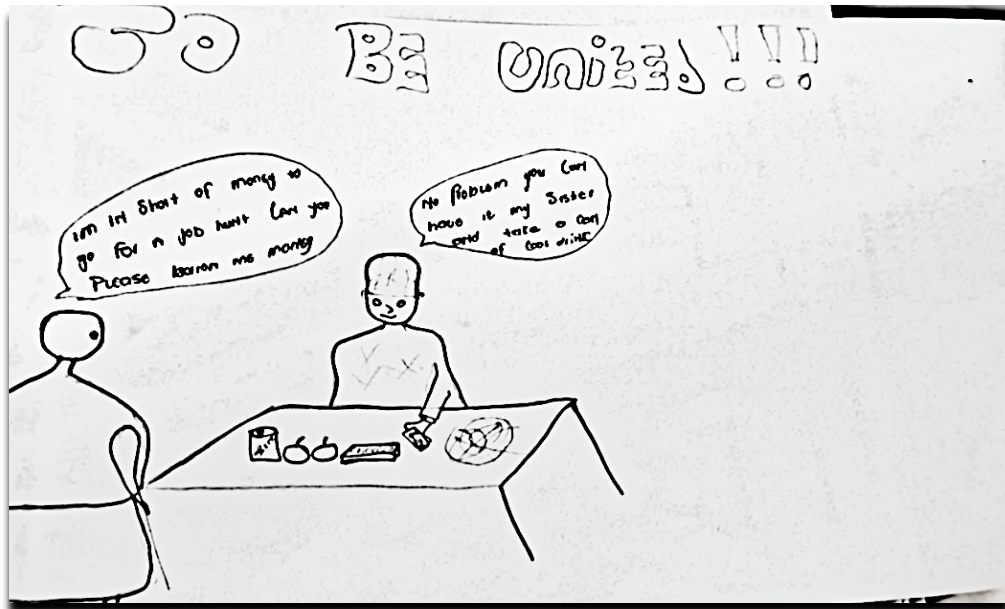


Figure 4.3: Kgomotso's drawing depicts how supportive community members promote resilience

International literature indicates that “social capital” encourages resilience processes among older adolescents (Bottrell, 2009; Ellison et al., 2007; Luthans et al., 2004). Social capital can be defined as “... resources embedded in one’s social networks, resources that can be accessed or mobilized through ties in the networks” (Aldrich & Meyer, 2015, p. 256). I think that social support networks fall under social capital, as the adolescents gain confidence and emotional and material support from their social support networks (i.e. a network of peer and community support). This is in line with South African adolescent resilience studies that note peer support (S. Ebersohn & Bouwer, 2013; A. M. Hall & Theron, 2016; Mampane, 2014; Nkosi & Daniels, 2007; Theron, 2016 Theron et al., 2011; Theron & Theron, 2010; Theron et al., 2013, Theron & Van Rensburg, 2018) and community support (Mampane, 2014; Theron & Malindi, 2010; Wild, Flisher, & Robertson, 2013) as resilience-enabling. Like my study, there are South African resilience studies carried out with black adolescents in a township context that have reported this theme of “Drawing on social support” (Cameron et al., 2013; Lethale & Pilay, 2013; Mosavel et al., 2105; Pretorius, 2016). However, none of these studies were done with older adolescents who live in close proximity to a petrochemical industry and have experiences of unemployment. Given the risks associated with the context of the participants (particularly the psychosocial and economic risks; see 2.22 and 2.2.3), the theme of social support made intuitive sense to me.

4.2 OUTLIER: RESILIENCE IS ABOUT KEEPING BUSY

Keeping busy can be defined as being a productive person in the face of unemployment. Some older adolescents felt that “keeping busy” involved actively going into the community and contributing, even if it is not to pursue a dream job, or there is no pay involved.

Only three of the seven participants mentioned “keeping busy” as a resilience-promoting factor, which is why I have included it as an outlier. Kgomotso felt that as an older adolescent, it was important to keep busy when unemployed. He believed that “keeping busy” by joining church groups or volunteering keeps older adolescents focused on achieving their goals. “Keeping busy” helps people to be strong. It also ensures that they are able to stay away from doing “bad things.” He believed that if unemployed persons do not “keep busy,” they would lose their passion and motivation to be successful.

Kgomotso:	<i>... Yes church groups or ... yes, yes, because like that thing will keep you busy and sometimes like I get home then, at least you go through movies, posters ...</i>
Me:	<i>Okay, so that, what you saying is that when you're unemployed it's good to stay busy?</i>
Kgomotso:	<i>Yes, yes, like volunteering and so on ... Because that's the way whereby you will, you'll focus on what you want When you're not busy. You, you will lose the passion and you will, you will end up doing bad things.</i>

Skriller agreed with this statement. In addition, he noted that if people did not keep busy, they would become lazy and miss out on opportunities for employment.

Skriller:	<i>Even if you can be a cleaner or whatever. Maybe there can be someone who can come there and wants your qualification and can get you a better job.</i>
Me:	<i>So, keeping busy can help you make connections?</i>
Skriller:	<i>I think (if you do not keep busy) you'd be useless.</i>

Sinethemba concurred with these views. He felt that keeping busy helps unemployed people motivate themselves to achieve their dreams. Further, he expanded on Kgomotso's idea that if you do not keep busy, you will get involved in "bad things." He stated that if unemployed people do not stay active, they will get involved with drugs and alcohol, and "give up" on their lives.

"I think when a person is not active, they lose motivation, their self-motivation ... They will end up doing bad things, maybe get involved in substances and give up in life" (Sinethemba).

I have included "keeping busy" in my findings, as I think it is a significant outlier because, although it was not reported by all the adolescents, the ones who reported it felt very strongly that "keeping busy" kept them out of trouble. Given the psychosocial risks associated with the participants' context (particularly violence and crime, see 2.2.2.2), the idea of keeping busy to avoid such risks made sense to me. The idea of "keeping busy" as a resilience-promoting factor is apparent in the international literature on resilience enablers among adolescents (Conder, Mirfin-Veitch, & Gates, 2015; Overall, Altrows, & Paulson, 2006; Harris, Brazeau, Clarkson, Brownlee, & Rawana, 2012; Kao & Salerno, 2014). South African resilience literature also states that "keeping busy" is a common factor in adolescents' explanations of resilience (Hills et al., 2016; Malindi, 2014). However, the South African literature that reported "keeping busy" as a resilience-enabler among adolescents, was focused on street-connected youth. These youth were not actively engaged in school or employment. As such, it is possible that the street-connected youth need to actively seek something to "keep them busy" and be more aware of the need to "keep busy" to enable resilience. I think a possible reason for more older adolescents not describing "keeping busy" as a resilience-promoting factor might be because these adolescents were already kept busy with their social networks, hobbies and passions (See: Themes One and Two). So although they did not actively verbalise "keeping busy" as a factor that promoted resilience, they did tacitly support this theme by focusing and working on their goals, passions and dreams for the future.

4.3. SILENT THEMES

4.3.1 RELIGION

Although religion and spirituality is apparent in the both the international (Archana et al., 2014; Hebbani & Srinivasan, 2016; Peres et al., 2007) and South African resilience literature (Lau & Van Niekerk, 2011; Malindi, 2014; Malindi & Theron, 2010; Mohangi,

Ebersöhn, & Eloff 2011; Van Breda & Theron, 2018) as an adolescent resilience-enabling process, it did not emerge with the participants in my study. This could be due to the fact that contemporary older adolescents are more likely to move away from traditional religion and rely on their own personal motivations and social support networks for strength (H. Hall & Delport, 2013). This silence could also be due to more modern influences such as social media and the internet, causing these older adolescents to question God's existence and the importance of spirituality (Theron, 2016).

4.4 CONCLUSION

Three notable themes emerged as enabling resilience in the face of unemployment in eMbalenhle. The themes appear to cover individual processes, taking advantage of opportunities and resources within the community, and drawing on support from social systems. This seems to indicate that resilience among adolescents with experience of unemployment in eMbalenhle, is related to both the individuals and their social ecology (Ungar, 2011). One outlier and a silent theme were reported. I also speculated as to the reasons for those themes not being reported as prominent among unemployed older adolescents in eMbalenhle. In the next and final chapter, I will reflect on my research process and findings.

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Chapter 5

Conclusion and Recommendations

5.1 INTRODUCTION

In this chapter I conclude my study. I begin by revisiting my research question. Next, I will reflect on what I learned and the insights I gained during the research process. I will then go on to discuss the limitations of my study. Finally, I will provide possible recommendations for future research as well as recommendations for educational psychologists.

5.2 RESEARCH QUESTION REVISITED

The main research question that guided my study of limited scope was: “How do adolescents from the eMbalenhle community explain resilience in the face of unemployment?” Figure 5.1 represents a comprehensive summary of the findings of my study as they relate to my research question and the theoretical framework, namely SERT, that I used to guide my study.

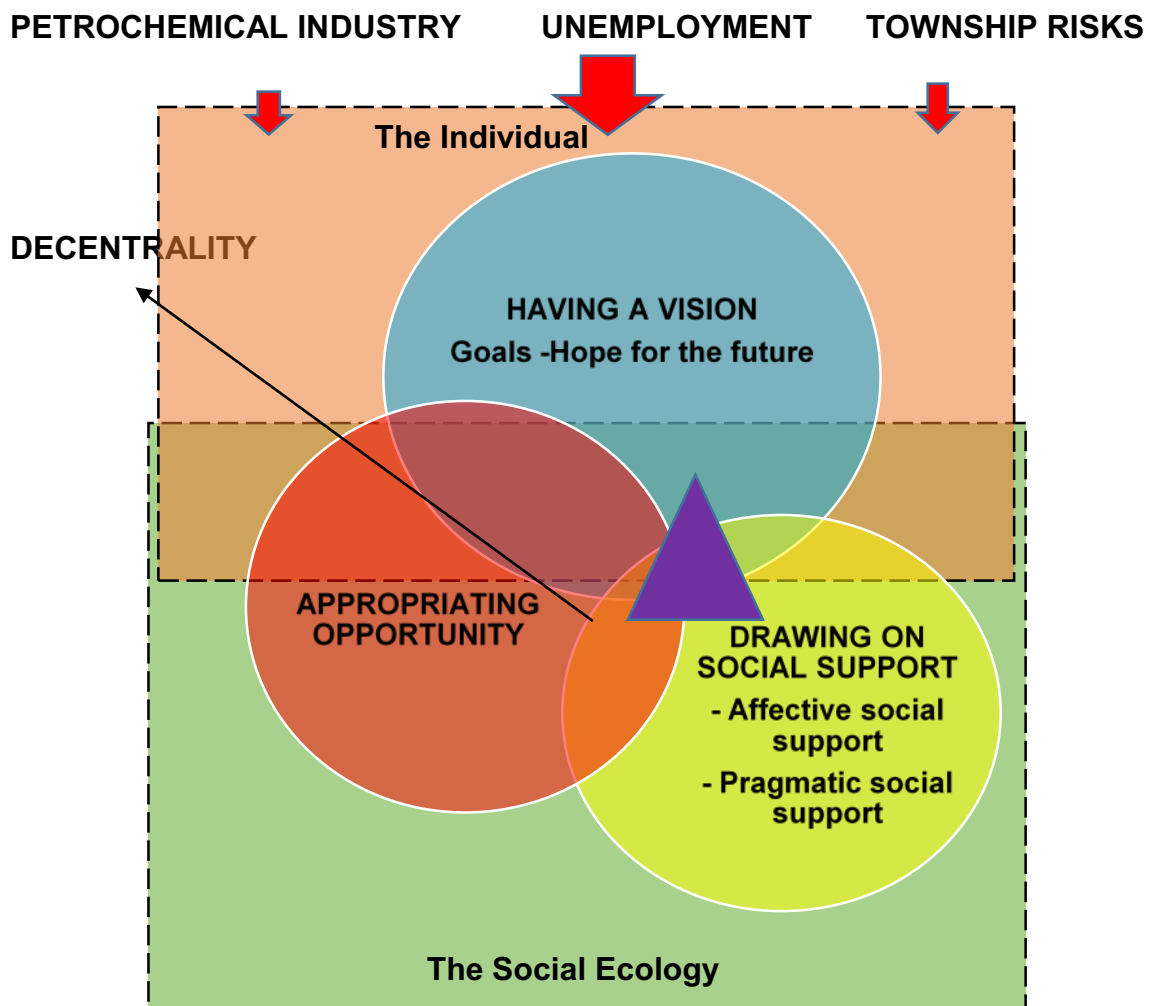


Figure 5.1: A visual summary of my findings

As I explained in Chapter 1, adversity or risk needs to be present for resilience to occur (Masten, 2001; Masten & O’Dougherty Wright, 2010; O’Dougherty Wright & Masten, 2015; Ungar, 2011, 2015). The participants involved in my study were theoretically challenged by multiple risks, including: the risks associated with living in close proximity to a petrochemical industry and township risks. These risks are illustrated by the red arrows in Figure 5.1. In reference to their limited resources (e.g. no money to pay for transport to an interview) and to “bad things” the participants confirmed the theoretical challenges I documented in Chapter 2 relating to unemployment and township residence. They made no mention of risks associated with the petrochemical industry (e.g. respiratory illness). I believe that this is because I assumed that their context (i.e. living in a township adjacent to a petrochemical industry and characterised by poverty and high unemployment; Statistics South Africa, 2016) was sufficient evidence of risk and I did not ask the participants directly about their experience of risk. I reflect on how I would do this differently, given a second opportunity (see 5.3). However, the focus of my study was on how these risks make adolescents more susceptible to or are interwoven with experiences of unemployment

and the associated risks of unemployment. For this reason, the red arrow is larger than the other two arrows that represent risk. Nevertheless, in the face of multiple risks, my participants acknowledged factors that promoted resilience. These factors stemmed from both the individual and the social ecology.

In Figure 5.1, the individual and the social ecology are depicted by two different coloured rectangles: this is to show that the individual and the social ecology provide the adolescents with different resources to draw on to enable resilience. The social ecology sits below the individual, because the findings of my research indicated the social ecology allowed the adolescents the space to “dream” and supported the strengthening of their individual resources. However, the rectangles overlap, and their borders are permeable because my study supported the belief that the individual and the social ecology work together to enable resilience (Masten, 2001; Ungar, 2011, 2015). The purple triangle represents SERT’s principle of *Decentrality* (Ungar, 2011), as strong evidence emerged from my research that supports this principle: it was clear to me that the participants explained that resilience, in the face of unemployment, was a product of both their individual and their social ecology.

The most prominent theme that arose as a resilience enabler in my study was “having a vision.” However, this theme was closely interlinked with participants’ ability to draw on “social support” and “appropriate opportunity,” as the participants explained that they need both affective and pragmatic social support, in addition to opportunity, in order to realise their visions. The (older) adolescents felt they drew on various individual resilience-enabling factors which were included under the theme of “having a vision.” Examples of these individual factors are “passion,” “internal motivation,” “being a goal go-getter,” “chasing dreams,” and “believing in yourself.” In addition, the participants felt that there were people in their lives that promoted resilience, but also encouraged them to “have a vision.” These factors included affective social support (particularly from peers), as well as pragmatic social support from the community. “Appropriating opportunities” is represented by the red circle, half in the social ecology and half in the individual. This is because the adolescents felt that there needed to be available opportunities within their community or social ecology in order for them to “appropriate” them. However, the participants also needed to draw on their internal motivation and drive and actively seek and take these opportunities, as the opportunities that arise may not always be a job they want or involve an activity they enjoy. As such, the individual resilience-enabling factors and the resilience-enabling factors drawn from the social ecology overlap and interconnect with one another, as shown in the transparency and permeable borders of Figure 5.1. This supports SERT

(Ungar, 2011), and in particular the principle of *Decentrality* (represented by the purple triangle), because both individual resilience-enabling factors and social ecological resilience-enabling factors worked together to promote resilience in spite of the multiple risks facing my participants.

As mentioned in the explanation of how I organised Figure 5.1, “having a vision” was my most prominent theme. Having a vision or having goals for the future is consistent with both international (Domhardt et al., 2015; Rosenberg et al., 2014; Smith, 2013; Sulimani-Aiden, 2016; Wilson et al., 2016) and South African literature (Smit et al., 2015; Van Breda, 2017; Van Breda & Dickens, 2017; Van Rensburg et al., 2013) on what enables resilience among older adolescents. However, as I explained in Chapter 2, there are no previous studies of adolescents who reside in an area affected by industry (petrochemical) and face the challenges of unemployment, albiet direct and indirect. As such, I believe that “having a vision” in the face of unemployment and other stressors, is a topic that needs to be further explored (I will elaborate on this point in Section 5.5 of this chapter). I think this is significant for an educational psychologist in South Africa, because this idea of having a vision could assist in interventions with older adolescents in matric or who have left school and are facing unemployment. I think having a vision, combined with identifying opportunities could provide a useful strategy for a period in life (older adolescents) that is often filled with uncertainty and risk (Sawyer et al., 2018).

5.3 REFLEXIVITY

Reflexivity in research can be explained as “awareness of the influence the researcher has on the people or topic being studied, while simultaneously recognising how the research experience is affecting the researcher” (Probst, 2015, p. 37). Berger (2015) explains that every researcher has “positionality” within their research, and this “positionality,” which could include aspects such as the researcher’s race, gender, sexual orientation, age, language and personal history, beliefs, biases and emotional responses to the participants, could influence both the research process and the outcomes. According to Gabriel (2015), consciously reflexive researchers do not pretend to be neutral, and they actively acknowledge the position they take. In addition, reflexive researchers remain cautious to the possibility that there may be aspects of their positionality that they are not aware of that may emerge from the research. According to Berger (2015), the position of the researcher can influence the research process in three important ways, namely: in access to the field; in the way the researcher may shape the development of the research-researched relationship and

consequently what information the participants choose to share; and in the way the researcher's own world view may shape the findings and outcomes of the research. Probst (2015, p. 46) notes that reflexivity is an important tool for research as it is "More than just a vehicle for honesty or management of the research experience, reflexivity offers a means for using self-knowledge to inform and enhance the research endeavour."

When I reflect on the methodology of my study of limited scope, I believe that it was extremely advantageous to be part of the larger RYSE study. This was my first experience of collecting data from participants, so it was helpful to be guided by experts in the field. It was also helpful to have the insight of the CAP, and their assistance in recruiting participants and in the member-check meeting. In addition, I also received valuable training in working with participants, collecting data through photo-elicitation (Harper, 2002) and coding with Atlas.ti.8. Although photo-elicitation did not work for my specific participants, I am of the opinion that it is a useful tool for generating data when working with adolescent participants, and I would try to use it again in future research. Although my participants arrived without photographs to complete the photo-elicitation activity, I learnt how to be adaptive and flexible in data collection, which are important skills when conducting qualitative research. Furthermore, being adaptive and flexible are important skills for me as an education psychologist in training, especially when working with children and adolescents, as I think that situations where I would need to think on my feet and change the original plan due to unforeseen circumstances, could happen often. I think that if I could repeat my study, I would probably prepare for the draw-and-talk method (Groundwater-Smith, Docket, & Bottrell, 2015) from the beginning, and I would ask my participants for two drawings, one that represented what they felt the risks they faced were, and one that represented their strength or resilience in the face of those risks (see: Pretorius & Theron, 2018). I think both a risk-or adversity-related, and a resilience-related drawing, would paint even clearer pictures of the participants' lived experience of the personal challenges they face in their contexts, as well as the resilience-enabling processes they use to manage their adversity.

One of my assumptions, (see Section 1.7 and 2.3.2) that was only partially confirmed, was that the older adolescents would draw considerable strength from the community and from religion or spirituality. I had made this assumption from both my personal experience of working with disadvantaged youth, as well as from the South African literature on adolescent resilience (see: Brittian et al., 2013; Lau & Van Niekerk, 2011; Van Breda, 2017). Although the participants in my study did draw some strength

from the community and family in terms of pragmatic support, the affective social support they spoke of came mainly from their peers. Many South African studies (see: A. M. Hall & Theron, 2016; Lethale & Pillay; 2013; Van Breda, 2017) have documented positive peer support as a factor that enables resilience. In contrast to my assumption, the participants did not refer to religion and/or spirituality as resilience-enabling factors in the face of unemployment. This raised some questions for me as to what was contributing to the absence of religion and/or spirituality as a resilience enabler in these participants' lives. As I mentioned in Chapter 4, this silence could be due to influences such as social media, which cause the adolescents to question whether God exists as well as the significance of spirituality in their lives. My findings confirmed another assumption that I initially held. This was that adolescents would explain resilience-enabling processes as a product of both the individual and the social ecology (Ungar, 2011), and that the participants would draw on peer support to promote resilience. I think these findings are important for me as an educational psychologist in training because they affirm that any therapeutic intervention is a collaborative effort (Exner, Jansen, Stroud & Du Preez, 2018). As such, I will consider the individuals and their social ecology when providing assessment and intervention.

Finally, as an educational psychologist in training, the literature has caused me to observe that resilience-promoting factors can manifest differently depending on age, culture and context (Masten, 2014a; Ungar, 2011, 2015). Due to the dynamic nature of resilience (Masten, 2004b), I as an educational psychologist in training, need to remain aware that different people use different resilience enablers. However, I will not know what individuals use to promote resilience until I have asked them directly. As such, I should remain aware of my assumptions and potential biases through self-reflection and reflexivity.

5.4 LIMITATIONS OF THIS STUDY

After reflecting on my qualitative study, I was able to identify various limitations. These include:

- Working in small groups can be a limitation in qualitative research. According to Fusch and Ness (2015), group work can cause participants to be silenced, and within those silences rich contributions could be lost. In my study, I initially found it quite difficult to ensure each participant had a turn to speak as some participants came across as shy, while others were eager to make lengthy contributions. However, as the process progressed, I respectfully reminded the

participants that each of their voices was equally valuable, and as such, each participant would have a fair opportunity to speak.

- In addition to working in small groups, the fact that my sample size was small and consisted of six participants could be considered a limitation to my research as the perceptions of a small group made me limited and/or cause group bias (Oppong, 2013). However, Groenewald (2004) indicates that a group of 2 to 10 participants is ideal for a descriptive phenomenological study (this is detailed in section 3.5.1). One way to avoid this limitation of potential group bias could be to conduct multiple forms of data collection with the same sample (Oppong, 2013).
- I had a limited amount of time to collect data and complete the arts-based activity. Although the aim of using the photo-elicitation method was to engage participants with the question prior to the day of data collection, this was not the case with my participants, as they only volunteered to participate on the day of data collection (see Chapter 3 for more detail). As such, the participants may have had less time to think about the specifics of my research question; this may have caused them to make less in-depth contributions.
- As the CAP were in charge of the participant recruitment process, I had limited control over the participants who chose to participate aside from the recruitment criteria. As it was, all of my participants were male. South African townships are likely to embrace more traditional gender roles for males and females (Mills et al., 2015). Consequently, older adolescent women may have responsibilities in the home on Saturday mornings, and therefore were less likely to be available for recruitment when the CAP went out to find participants. As there were only male participants, the perspectives the participants provided could be limited to this aspect of their “positioning” (Berger, 2015). I think that female voices may have provided different perspectives in this study.
- In addition, a direct experience of the challenges of unemployment may provide different data outcomes. The majority of my participants had indirect experience (e.g. they had experienced parental unemployment, or witnessed peers challenged by unemployment for lengthy periods of time). Only one of my participants was currently unemployed.
- A final limitation to my study was my own inexperience with collecting data. As already stated, this was my first time gathering data from participants. As such, I was quite anxious, and this might have influenced the quality of the data.

5.5 RECOMMENDATIONS

5.5.1 RECOMMENDATIONS FOR FUTURE RESEARCH

As my study was exploratory, it opened up directions for follow-up research (Creswell & Poth, 2018). I think that understanding and promoting resilience in the face of unemployment amongst older adolescents is an important area of research, particularly in South Africa where unemployment is rife (Statistics South Africa, 2018b). In order to gain more insight into the explanations of resilience from older adolescents living in eMbalenhle in the face of unemployment, I would make the following recommendations. Firstly, I think it would be important to conduct a study that uses participants' journals and one-on-one interviews, in addition to informal group discussions, to allow all participants to contribute richly to the data generation process (Fusch & Ness, 2015). As reflected in 5.3, a future study should preferably use these methods (along with an additional drawing, if participants are willing to draw) to enquire about experiences of risk and resilience. In addition, the journals may allow the participants more time to think about their resilience-enabling processes while they are experiencing their adversity or give them the chance to reflect on their experiences. Furthermore, I think it would be useful to have multiple arts-based data generation methods (such as draw-and-talk, body mapping, clay modelling, etc.), and give the participants the opportunity to choose which activity resonates with them. I would also recommend collecting data from female participants, as well as participants who are all currently unemployed and actively seeking work, as that may provide deeper or different insights into resilience in the face of unemployment. I also recommend that the data generation be conducted over a period of two days. This recommendation could help the researcher to build rapport with participants, allow participants more time to reflect on the research question, and enable the participants to feel more comfortable with engaging in an arts-based activity such as draw-and-talk (Mitchell et al., 2011).

5.5.2 RECOMMENDATIONS FOR EDUCATIONAL PSYCHOLOGISTS

Assisting adolescents with creating and having a vision could be a very useful strategy to be implemented in school Life Orientation classes, as well as in career counselling (Maree, 2013). This could also drive students to further their studies. Life orientation classes and career counselling aimed at these adolescents should not be limited to academic career counselling. As Di Fabio, Maree and Kenny (2019) explain, the current world of work is wracked with insecurity, instability and sudden change. As

such, career counselling should guide the adolescents to discover their identity and interests, rather than a specific career path. Entrepreneurial activities and skills for the 21st century could be extremely beneficial for adolescents in similar contexts to my participants and these skills could enable these participants to be self-employed rather than rely on others. In addition, in areas where educational psychologists are difficult to access on a regular basis, members of the community, family members and teachers could be psycho-educated and encouraged to facilitate strategies that support adolescents to build or create a vision for the future and encourage them to be aware of and draw on their available social support in times of unemployment. In addition to this, adolescents could also be empowered to use strategies for managing disappointment in instances where their “vision for the future” does not lead to gainful employment. Furthermore, members of the community, family members and teachers could aid adolescents in learning how to appropriate employment opportunities that are available within their social ecology. These strategies could promote resilience amongst older adolescents in the face of unemployment.

Melchior et al. (2015) explain that individuals with lower levels of education attainment are more likely to experience unemployment. In addition, their study found that a combination of unemployment and low levels of education was likely to contribute to alcohol and substance abuse. This fits with the description of my participants (see Table 3.1). of the seven participants, five were still in school (despite being older than 18) or upgrading their marks. Even though they did not emphasise the resilience-enabling potential of education, they did consider it an opportunity to be seized. Pillay (2014) notes that educational psychologists have a responsibility to create relevant interventions that impact systemic risks (such as poor education) and optimise well-being. Therefore, I would recommend interventions within educational psychology that attempt to combat low levels of education amongst older adolescents in South Africa, particularly in light of South Africa’s matric pass rate, which in 2018 was 78.2% (Nkosi, 2019). This number does not look too concerning, until we consider that more than half of the students enrolled in Grade 10 in 2016 did not make it to their matric exams in 2018 (Ngqakamba, 2019). I think that if educational psychologists advocate for better quality education in South African schools, as well as more comprehensive support for learners who experience barriers to learning, adolescents may receive an additional form of psychosocial support to draw on. Currently, this additional psychosocial support is not widely available to adolescents from resource-constrained communities in South Africa (Docrat, Lund, & Chisholm, 2019; Haffejee & Theron, 2019).

5.6 CONCLUSION

The adolescents in my study are challenged by the multiple risks of living in close proximity to a petrochemical industry, and township life. Experiences of unemployment are also strongly associated with these adolescents' contexts of risk and create further obstacles to their pursuit of positive life outcomes. However, in the face of all these risks they are still motivated towards "appropriating opportunities". "Appropriating opportunities" require a combination of aspects of the individuals' own self-motivation, in the sense that they need to actively seek opportunities apart from the available employment opportunities in their social ecology. To foster resilience also requires that older adolescents "draw on social support" from their peers, family and community. However, the most prominent resilience enabler to emerge from my study was "having a vision" for a hopeful future. According to the older adolescents in my study, this vision supported the capacity to live optimistically in spite of their daily adversity. Thus, the individual and their social ecology work together to enable resilience (Ungar, 2011). The quote by Stedman Graham (Graham, 1998. p. 66) in Figure 5.2 illustrates the significance of this main finding of my study. I think this finding is important because so many South Africans live in fear (Davis, 2017). However, if we, as researchers and educational psychologists, can champion resilience by assisting adolescents to create a vision for their future that is supported by opportunity and social support, we will be in a better position to change that fear to hope.

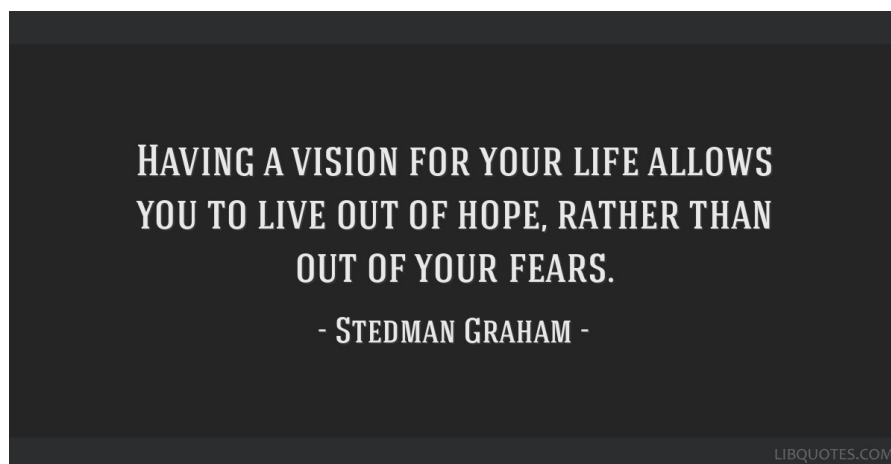


Figure 5.2: Having a vision (retrieved from libquotes.com)

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APPENDICES

Appendix A:
Audit Trail

Appendix B:
Informed Consent

Appendix C:
Ethical Clearance for My Study

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Atlas.ti audit trail – Code book from Atlas.ti

ATLAS.ti Report

RYSE Data 14/04/2018 KM

Codes

Report created by Katherine on 30 Jan 2019

● **Resilience is about adaptation**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

● **Resilience is about agency**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

● **Resilience is about agency and making good use of support**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

● **Resilience is about agency and using your connections**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

● **Resilience is about agency_having goals**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

● **Resilience is about asking for help**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

- **Resilience is about asking for help and feeling motivated**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

- **Resilience is about avoiding bad influences**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about being dedicated to your goals**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about being proud of your talents**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about believing in yourself**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about chasing your dreams**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about family motivation**


Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about finding talents that inspire you**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:  Resilience is about having a vision

- **Resilience is about finding talents that motivate you**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about having a vision

- **Resilience is about finding your passion**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about having a vision

- **Resilience is about having and taking opportunities**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about appropriating opportunity

- **Resilience is about having connections_talents**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about appropriating opportunity

- **Resilience is about having family who push you**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about drawing on social support

- **Resilience is about having family who push you_school**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about drawing on social support

- **Resilience is about having people who believe in you**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

 Resilience is about drawing on social support

- **Resilience is about having people who can push your talents**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

- **Resilience is about having role models**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups: 🔗 Resilience is about appropriating opportunity

- **Resilience is about having something you love doing**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about helping other people**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about keeping busy_community groups**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about keeping busy

- **Resilience is about keeping busy_staying focused on your goals**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about keeping busy

- **Resilience is about knowing what you want**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about knowing your strengths and weaknesses**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about not dissapointing others**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about not feeling alone**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about not giving up**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

- **Resilience is about not overrelying on others**

Created: 2018/05/22 by Katherine, **Modified:** 2018/06/16 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

- **Resilience is about picturing success in difficult times**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about appropriating opportunity

- **Resilience is about support from family_emotional**

Created: 2018/05/22 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about support from family_providing for you**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about support from family_wanting the best for you**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about support from friends**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about support from the community**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about drawing on social support

- **Resilience is about using your talents**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups: 🔗 Resilience is about having a vision

- **Resilience is about using your talents_courage**

Created: 2018/05/24 by Katherine, **Modified:** 2018/05/30 by Katherine

Groups:

🔗 Resilience is about having a vision

Inclusion/exclusion criteria for themes reported in Chapter 4

Theme	Inclusion criteria	Exclusion criteria
Having a vision	Any reference to having plans and goals for the future	Any reference to adolescents not working towards any future goals or plans to enable resilience or any reference to a vision that is likely to heighten vulnerability or risk (e.g. a vision to become a drug-dealer)
Appropriating opportunity	Any reference to using available employment-related opportunities while unemployed or opportunities that can advance chances for employment (e.g. education).	Any reference to the adolescent forcefully appropriating opportunities or appropriating opportunities for anti-social outcomes e.g appropriating opportunities to join a gang or steal or to be involved in illegal activities.
Drawing on social support	Any reference to drawing on pragmatic and affective support for motivation while unemployed	Any reference to drawing on social or pragmatic support that has a negative influence on the participants' behaviour (e.g. using alcohol or drugs) or using affective support without any education or employment goals or affective support that allows stops the participants from trying to gain employment.



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

PARTICIPANT INVITATION AND CONSENT FORM – Activity 2 (Young Adults)

We invite you to participate in a project called: *Patterns of Resilience among Youth in Communities that Depend on Oil and Gas Production and Those Coping with Climate Change*.

Who are we?

We are researchers from the University of Pretoria (South Africa), Dalhousie University (Canada), Royal Roads University (Canada) and Khulisa Social Solutions (South Africa). Our contact details are at the end of this letter if you need them.

What are we doing in this project?

Broadly, we want to learn from you (and other people from the Secunda area) what makes it possible for people to be OK in life when they live in communities which are involved in the oil and gas (petrochemical) industry. We will do the same with people living in North American communities which are involved in and challenged by the petrochemical industry. We will use this information to better understand what makes it possible for people to be healthy and to feel good. We want to use this understanding to make it possible for more people who live in communities involved in the petrochemical industry to be healthy and feel good.

The Research Ethics Committee of the Faculty of Education, University of Pretoria has said it is OK for us to do this study (UP 17/05/01). They know we will work carefully using South Africa's and international ethical rules (this is actually called the guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council). The committee will maybe want to look at the forms you sign (if you say yes to being in this study) to check that we did everything in the right way.

Why are we asking you to be part of this project?

Because you

1. Are 18-24 years old, *and*
2. Are OK speaking English and can read and write in English, *and*
3. Live in the Secunda area, Mpumalanga, *and*
4. Have been affected (negatively or positively) by the petrochemical industry,
5. Were recommended as a participant for this project by someone working at Khulisa or by a member of the project's Community Advisory Panel.

What do you need to know?

Room 4-1.7, Level 4, Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 1234
Fax +27 (0)12 420 5678
Email name.surname@up.ac.za
www.up.ac.za

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto



PARTICIPANT INVITATION AND CONSENT FORM – Activity 2 (Young Adults)

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Because you

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2. Are OK speaking English and can read and write in English, *and*
3. Live in the Secunda area, Mpumalanga, *and*
4. Have been affected (negatively or positively) by the petrochemical industry,
5. Were recommended as a participant for this project by someone working at Khulisa or by a member of the project's Community Advisory Panel.

What do you need to know?

- You can say no. If you say no, there will be no problem, you don't need to give a reason. Even if you say yes now, it is OK for you to change your mind later and stop taking part.
- If something (like drug use) makes it hard for you to understand clearly what this project is about, we will not be able to let you take part.

If you say yes, what will you be asked to do?

You will be asked to participate in a research activity

Date and time	Place	Description
Date:	Embalenhle Sasol Club	We will ask you (and the other young people in your group) to use an artistic activity (we will give you everything you need to do this) that will help answer the following questions: <ul style="list-style-type: none"> – How does the petrochemical industry affect your life? – Are young men and women affected differently and if so how? – What does it mean for a young person to be OK when the petrochemical industry affects their life in a negative way? – What/who makes it possible for young people to be OK when the petrochemical industry affects their life in a negative way? – Are there differences in what/who makes it possible for young men and women to be OK when the petrochemical industry affects their life in a negative way, and if so how?
Time:		

We will ask your permission to audio record the above so that we can write down what you say. We will also use video cameras to record what you are saying and doing during the research. We will also take photos of you during the research; we will ask your permission to use your pictures in on social media and on our websites.

What do you get out of this?

We would like to offer you R100 as a token of our appreciation. At the end of this study, a copy of the findings will be made available to you if you would like to have them.

Can you get hurt by taking part?

We don't think that you can get hurt physically, but there are some other risks. We explain them below and what we will do to manage them.

Possible / Probable risks/discomforts	Strategies to minimise risk/discomfort
Speaking English could be tiring or difficult.	If you prefer, you can speak in your home language. We will ask members of the research team or others in your group to translate into English so that the researchers who speak English can also understand.
You will complete the activities on [date] in a group.	Because you will be part of a group, other people will know that you participated and what you said. To try and minimize outsiders knowing what you said, we will agree on group rules (e.g., treating one another respectfully; not talking to others about what specific participants said/did).
If your group chooses to use a video-activity and this video is made public, your community and many other people will know that you participated in the study.	You do not have to take part in the video. Alternatively, if you do want to take part but you don't want other people to identify you, then we can find ways of hiding your face (e.g., by wearing a mask). You can also choose whether your name is added to the credits or list of people who are in the video.

What will happen to what you write or draw or make or say during the study?

We will ask a person/people to listen to the audio-recordings of the activity that you did and type what you and the other participants have said. This person/these people will sign a form in which they promise to keep the recording private (meaning they can't tell anyone anything about what they listen to and type up). Once everything is typed up, the researchers from the University of Pretoria will delete (erase/wipe out) what was recorded.

We (the South African and Canadian researchers working in the project) will study the typed-up version of what you and others said. We will use the information you gave us to finalize a questionnaire that we will ask about 300 young people from the Secunda area to complete. We will also use it to write about what makes it harder and easier for young people to do well in life. We will probably quote what you said/wrote or show the drawings you made when we write about what we learnt from you or when we tell others about what we learnt from you (e.g., at a conference or when we teach students). We will also compare what you tell us with what we have learnt from young people living in Canadian communities which are involved in the petrochemical industry and use this comparison to better understand how young people think about health and about feeling good.

We will keep a copy of what you said in a safe place at the University of Pretoria. We will keep the copies for 10 years. Your name will not be on any of these copies. We will allow university students who have to complete research projects about resilience, adolescents, climate change or communities dependent on petrochemical producing companies to use these copies for their research projects.

Who will see the forms you sign and what happens to them?

Only the researchers from the University of Pretoria will have access to the forms that you sign. They will store these forms for 10 years.

Will it cost you anything to take part in this study?

No, it will not cost you anything. We will pay the cost of the local bus/local taxi that you use to participate in the research activities on _____

Do you have questions to ask?

- If you have questions you can email Linda Theron at Linda.theron@up.ac.za or phone her at 012 420 6211. You can also contact Mosna Khaile at 0767756180 or email her at Khaile.mosna@up.ac.za
- You can contact the chair of the Research Ethics Committee, Prof Liesel Ebersohn on (012 422 2337) if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

Thank you very much for considering our invitation!

Linda and Mosna

Declaration by participant

By signing below, I [full name] agree to take part in a research study named: *Patterns of Resilience Among Youth in Communities that Depend on Oil and Gas Production and Those Coping with Climate Change*.

I say that:

- I have read and understood this information and consent form and it is written in a language with which I am fluent enough and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher (if this is a different person), and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** (I can say no) and I have not been pressurised to take part.
- I understand that what I contribute (what I say/write/draw) could be reproduced publicly and/or quoted.
- I reserve the right to decide whether or not my actual name or a made-up one will be used in the research. I will decide this at the end of my participation once I have a better understanding of what is involved, and once I have talked through what that would mean with the university researchers.
- I understand that I may choose to leave the study at any time and that will not be a problem. I also understand that once the findings of the study are in the process of publication I cannot withdraw what I contributed to the study.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests.
- I agree that photos/videos of me engaging in research activities can be put up on social media and on research websites and be used in research-related publications/conference papers.

Signed at (*place*) on (*date*) 2017

.....
Signature of participant

.....
Signature of witness

You may contact me again	Yes	No
I would like a summary of findings	Yes	No

My contact details are:

Name & Surname: _____

Age: _____

Male / Female: _____

Postal Address: _____

Email: _____

Phone Number: _____

Cell Phone Number: _____

In case the above details change, please contact the following person who knows me well and who does not live with me and who will help you to contact me:

Name & Surname: _____

Phone/ Cell Phone Number /Email: _____

Declaration by person obtaining consent

I (*name*) declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above.
- I did/did not use an interpreter.

Signed at (*place*) on (*date*) 2017

.....
Signature of person obtaining consent

.....
Signature of witness

Declaration by researcher

I (*name*) declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) on (*date*) 2017

.....
Signature of researcher

.....
Signature of witness

Appendix C: Ethical Clearance for My Study



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Ethics Committee

11 April 2018

Ms Katherine Malakou

Dear Ms Malakou

REFERENCE: UP 17/05/01 Theron 18-004

This letter serves to confirm that your application was carefully considered by the Faculty of Education Ethics Committee. The final decision of the Ethics Committee is that your application has been **approved** and you may now start with your data collection. The decision covers the entire research process and not only the days that data will be collected. The approval is valid for two years for a Masters and three for Doctorate.

The approval by the Ethics Committee is subject to the following conditions being met:

1. The research will be conducted as stipulated on the application form submitted to the Ethics Committee with the supporting documents.
2. Proof of how you adhered to the Department of Basic Education (DBE) policy for research must be submitted where relevant.
3. In the event that the research protocol changed for whatever reason the Ethics Committee must be notified thereof by submitting an amendment to the application (Section E), together with all the supporting documentation that will be used for data collection namely; questionnaires, interview schedules and observation schedules, for further approval before data can be collected. **Non-compliance implies that the Committee's approval is null and void.** The changes may include the following but are not limited to:
 - Change of investigator,
 - Research methods any other aspect therefore and,
 - Participants
 - Sites

The Ethics Committee of the Faculty of Education does not accept any liability for research misconduct, of whatsoever nature, committed by the researcher(s) in the implementation of the approved protocol.

Upon completion of your research you will need to submit the following documentations to the Ethics Committee for your Clearance Certificate:

- Integrated Declaration Form (Form D08),
- Initial Ethics Approval letter and,
- Approval of Title.

Please quote the reference number **UP 17/05/01 Theron 18-004** in any communication with the Ethics Committee.

Best wishes

A handwritten signature in black ink, appearing to read 'Liesel Ebersöhn'.

Prof Liesel Ebersöhn
Chair: Ethics Committee
Faculty of Education

---ooOoo---